

1 IN THE UNITED STATES DISTRICT COURT
2 FOR THE EASTERN DISTRICT OF TEXAS
3 TYLER DIVISION

4 ERICSSON, INC., ET AL)
5 -vs-)
6 D-LINK CORPORATION, ET AL) DOCKET NO. 6:10cv473
) Tyler, Texas
) 9:04 a.m.
) June 11, 2013

7
8 TRANSCRIPT OF TRIAL
9 MORNING SESSION
10 BEFORE THE HONORABLE LEONARD DAVIS,
 UNITED STATES CHIEF DISTRICT JUDGE, AND A JURY

11 A P P E A R A N C E S

12
13 FOR THE PLAINTIFFS:

14 MR. THEODORE STEVENSON, III
15 MR. DOUGLAS A. CAWLEY
16 McKOOL SMITH
17 300 Crescent Court, Ste. 1500
18 Dallas, Texas 75201

19 MR. JOHN B. CAMPBELL, JR.
20 McKOOL SMITH
21 300 W. 6th Street, Suite 1700
22 Austin, Texas 78701

23 COURT REPORTERS: MS. JUDITH WERLINGER
24 MS. SHEA SLOAN
25 shea_sloan@txed.uscourts.gov

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1 FOR THE DEFENDANT:

2

MR. GREGORY S. AROVAS
3 KIRKLAND & ELLIS, LLP
601 Lexington Avenue
4 New York, New York 10022

5

6 MR. LUKE DAUCHOT
KIRKLAND & ELLIS, LLP
7 333 S. Hope Street
29th Floor
8 Los Angeles, California 90071

9

10 MR. ADAM ALPER
KIRKLAND & ELLIS, LLP
11 555 California St.
24th Floor
12 San Francisco, California 94104

13

14 MR. MICHAEL E. JONES
POTTER MINTON, PC
15 110 N. College, Ste. 500
P.O. Box 359
16 Tyler, Texas 75710-0359

17

18 MR. ROBERT A. VAN NEST
KEKER & VAN NEST, LLP
19 633 Sansome St.
San Francisco, California 94111

20

21

22

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24

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1 P R O C E E D I N G S

2 COURT SECURITY OFFICER: All rise.

3 (Jury in.)

4 THE COURT: Please be seated.

5 Good morning, Ladies and Gentleman.

6 JURORS: Good morning.

7 THE COURT: We're ready for our final day

8 of testimony, so I'm glad you're here. You look ready

9 to go, so please pay close attention.

10 You may proceed, Mr. Van Nest.

11 MR. VAN NEST: Good morning.

12 Thank you, Your Honor.

13 Good morning, Ladies and Gentleman.

14 Your Honor, we're going to begin the

15 morning with a couple of short video depositions.

16 THE COURT: Okay.

17 MR. VAN NEST: This first one will be the

18 video deposition of Dr. Dietmar Petras. Dr. Petras is

19 one of the authors of the Petras ETSI submission, and he

20 is a co-inventor on the Walke patent.

21 And the time on this, Your Honor, is

22 6 minutes and 48 seconds; 6 minutes and 40 seconds will

23 be charged to the Defendants, and 8 seconds will be

24 charged to the Plaintiff.

25 THE COURT: Okay. All right.

1 (Video playing.)

2 QUESTION: Could you please introduce
3 yourself for the video?

4 ANSWER: Yes. My name is Dietmar Petras.

5 QUESTION: Do you have Exhibit 10 to your
6 disclosure statement?

7 ANSWER: Yes.

8 QUESTION: And that is a patent that ends
9 in No. '280?

10 ANSWER: Yes.

11 QUESTION: Is this a patent on which you
12 are a listed inventor with Dr. Walke?

13 ANSWER: Yes.

14 QUESTION: Why don't you just explain to
15 me in English? It doesn't have to be an exact
16 translation.

17 ANSWER: Yes. So the subject of this
18 patent is methodologies and cellular mobile system on
19 wireless, broadband access of mobile stations with an
20 ATM interface to an ATM network, where the special
21 purpose is the error correction mechanism with Automatic
22 Repeat Request protocol.

23 QUESTION: Dr. Walke, who is listed on
24 the patent with you, who is he?

25 ANSWER: Dr. Walke is a professor here at

1 the Aachen University and he was the advisor of my Ph.D.
2 and my boss at that time.

3 QUESTION: November of 1995, when you
4 filed for this patent, was that during the time that you
5 were researching and preparing your Ph.D. at ComNets?

6 ANSWER: Yes.

7 QUESTION: Can you identify that
8 document, please?

9 ANSWER: Yes. That is the German version
10 of the diploma thesis of Ulrich Vornefeld. The English
11 translation of the title is Simulation -- Simulative and
12 analytical investigation of quality of service
13 supporting measures for radio-based ATM network.

14 QUESTION: Is that your name at the
15 bottom?

16 ANSWER: Yes. So at the bottom it says
17 that this work was advised by Professor Walke, by
18 Andreas Hettich and by me.

19 QUESTION: Did you review this diploma
20 thesis before it was completed?

21 ANSWER: Yes.

22 QUESTION: I'd like to turn now to your
23 participation in ETSI BRAN.

24 ANSWER: Uh-huh.

25 QUESTION: Approximately how many ETSI

1 BRAN meetings do you believe that you attended in the
2 '95 to '98/'99 time frame?

3 ANSWER: That is a difficult question.

4 Actually while trying to remember I tried to count and
5 didn't find them all. Five, six, seven, eight, around
6 that.

7 QUESTION: Who would have been permitted
8 to join the working group meetings and attend? I'm not
9 talking just about ComNets. I mean, in general.

10 ANSWER: I don't know the precise
11 procedure. So you had to be member of ETSI; and as far
12 as I remember, everybody from the industry who was
13 interested could participate.

14 Our situation as a research institute was
15 a little bit different I think. I even don't know if
16 ComNets was a member of ETSI, but we've been invited
17 because we have been interested and we've been able to
18 provide interesting contributions. I think ComNets was
19 not even a member of ETSI, but we were there as a
20 partner or consultant of Daimler-Benz.

21 QUESTION: Can you describe the ways in
22 which you had access to ETSI BRAN working group
23 documents during that time period?

24 ANSWER: Yes. So that changed over time.
25 At the beginning it was not even the ETSI BRAN working

1 group, but it was called HiperLAN, and there the
2 exchange of documents mainly worked by the mail
3 reflector and by providing or putting -- or taking paper
4 versions of the document and distributing it at the
5 meetings, and by providing an electronic version to the
6 chair, who was then distributing it or putting it on a
7 web page.

8 Towards the end of my time at then ETSI
9 BRAN I remember that in the meantime there was a very
10 official procedure with a website where you had to get
11 document numbers, upload them, but still here we -- we
12 always took paper versions of the paper to the workings
13 for the meetings.

14 So when the meeting started there was a
15 table where you were putting thirty copies of the paper.
16 The paper was distributed to everybody interested.

17 At the beginning of the meeting the
18 chairman was going over each document, ensuring that
19 everybody who was interested could get a copy, a paper
20 copy; and, again, the chairman was collecting the
21 electronic version of the papers in addition to it was
22 uploaded to the web page.

23 QUESTION: You referenced at the
24 beginning of your answer a reflector. What did you mean
25 by that?

1 ANSWER: That is an e-mail address where
2 you can register so that you can distribute to many
3 e-mails.

4 QUESTION: Can you please identify that
5 document?

6 ANSWER: That is a document provided to
7 the ETSI BRAN Working Group 3 with a temporary document
8 number 76. The authors are me, Ulrich Vornefeld, Markus
9 Scheibenbogen. The title is: Candidate protocol stack
10 (Medium Access Control and Logical Link Control) for
11 Wireless ATM Air Interface.

12 QUESTION: What is the date of this
13 document?

14 ANSWER: The date of the document is 13th
15 October, 1997. At least that is what is stated here at
16 this paper version.

17 QUESTION: Do you recall what conference
18 this paper was presented at?

19 ANSWER: I remember that it was a working
20 group meeting, Working Group 3, which means the HiperLAN
21 working group at BRAN, but I don't remember the right
22 day when it was presented or the location, because there
23 have been multiple meetings during that time frame over
24 a very short time and I don't remember the detail.

25 QUESTION: Do you recall whether you

1 personally presented this paper?

2 ANSWER: No, I don't.

3 (End of video clip.)

4 THE COURT: All right. Who will your
5 next witness be?

6 MR. VAN NEST: Your Honor, we're going to
7 play one more very short video deposition, and this will
8 be the testimony of Mr. Nihls Forslund. Mr. Forslund is
9 a director of patent portfolio management at Ericsson.

10 And the time on this one totals 1 minute,
11 26 seconds; a minute 12 for Defense and 20 -- and 14
12 seconds for Plaintiff.

13 THE COURT: THE COURT: All right.

14 (Video playing.)

15 QUESTION: Is Ericsson willing to provide
16 FRAND licenses to chipset suppliers for Wi-Fi
17 technologies?

18 ANSWER: I believe that is not the
19 policy.

20 QUESTION: And you write, quote, okay,
21 but remember we have promised to be, quote, fair and
22 reasonable, close quote, in other words, equally mean to
23 everyone?

24 ANSWER: Right.

25 QUESTION: Exclamation point?

1 ANSWER: Right.

2 QUESTION: Did I read that correctly?

3 ANSWER: Let me see the translation, the
4 original version.

5 Yes. Seems so, yes.

6 QUESTION: You'd agree with me, wouldn't
7 you, Mr. Forslund, that being mean to potential
8 licensees is not consistent with Ericsson's RAND and
9 FRAND obligations?

10 ANSWER: I don't know if I can comment on
11 that, one way or the other, actually.

12 QUESTION: You can't comment, one way or
13 the other, whether it's --

14 ANSWER: I mean, theoretically, if you're
15 saying -- I mean, the term "mean" here is if you say you
16 are equally mean to everybody, you're not discriminating
17 to anyone, right?

18 QUESTION: Do you think being mean to
19 individuals is consistent with Ericsson's RAND and FRAND
20 obligations?

21 ANSWER: I think being "mean" is a very
22 unfortunate personal expression I used here, so it's not
23 something which Ericsson would use. It's a completely
24 personal -- personal expression.

25 (End of video clip.)

1 THE COURT: All right. Who will be your
2 next witness?

3 MR. VAN NEST: Your Honor, the Defendants
4 call Dr. Ray Perryman.

5 THE COURT: All right. Dr. Perryman.

6 While Dr. Perryman is coming up, let me
7 inquire if either side has exhibits they wish to offer
8 this morning. We'll get that out of the way.

9 MR. NEMUNAITIS: Yes, Your Honor,
10 Ericsson offers Plaintiffs' Pre-admitted Exhibit List
11 for June 11, 2013, and Plaintiffs' Demonstratives 1
12 through 12.

13 THE COURT: All right. We'll mark that
14 list as Plaintiffs' Exhibit List No. 6.

15 Is there any objection to those exhibits?

16 MR. DeVRIES: We -- I don't know that
17 we've seen the list of the demonstratives. I don't
18 expect there to be an objection to the demonstratives,
19 but we'd request an opportunity to review those.

20 THE COURT: All right. The Plaintiffs'
21 Exhibit List No. 6, the exhibits contained thereon, are
22 admitted.

23 As to the demonstratives, they've just
24 been marked.

25 MR. DE VRIES: Thank you, Your Honor.

1 And Defendants have a similar list.

2 THE COURT: All right.

3 MR. DE VRIES: It's Defendants'

4 Supplemental List of Pre-admitted Exhibits for June 11,
5 2013.

6 THE COURT: All right. And we'll mark
7 that as Defendants' Exhibit List No. 6.

8 Are there any objections to the exhibits
9 contained thereon?

10 MR. NEMUNAITIS: No, Your Honor.

11 THE COURT: Those exhibits are admitted.

12 Dr. Perryman, were you sworn the first
13 day?

14 THE WITNESS: Yes, Your Honor, I was.

15 THE COURT: All right. You may proceed,
16 Mr. Jones.

17 MR. JONES: Thank you, Your Honor. May
18 it please the Court.

19 RAY PERRYMAN, DEFENDANTS' WITNESS,

20 PREVIOUSLY SWORN

21 DIRECT EXAMINATION

22 BY MR. JONES:

23 Q. Dr. Perryman, would you please introduce
24 yourself to the jury?

25 A. My name is Ray Perryman.

1 Q. And can you tell us a little bit about your
2 family?

3 A. Yes, sir. I'm married. I have five children
4 between the ages of 25 and 30, and one absolutely
5 marvelous grandson who's four months old.

6 Q. I've got one, too. I know what you -- what
7 you -- how you feel about that.

8 Let me ask you this: Where do you live, sir?

9 A. I live in Odessa, Texas.

10 Q. And where do you work, sir?

11 A. I work in Waco.

12 Q. That's a pretty good commute. Can you tell us
13 how that came to be?

14 A. Yeah, I can, actually. I have worked in Waco
15 for a long time. My career started at Baylor, and
16 I've -- I've worked in Waco forever. And about 20 years
17 ago, I was fortunate enough to meet and fall in love
18 with and marry a young lady who was Mayor of Odessa at
19 the time, so I moved.

20 Q. Thank you, sir.

21 Now, you did you grow up in Lindale, Texas,
22 sir?

23 A. I did, yes, sir.

24 Q. Were you a Lindale Eagle?

25 A. Still am.

1 Q. Did you go to Lindale High School?

2 A. I did, yes, sir.

3 Q. Thank you. We'll get into your education in
4 just a second; but, first, what is your profession, Dr.
5 Perryman?

6 A. I'm an economist.

7 Q. And what is your role in this particular case?

8 A. Well, I've been retained by the Defendants to
9 determine the appropriate level of compensation to
10 Ericsson if it's found that the patents are valid and
11 infringed.

12 Q. Well, I'd like to next turn and talk a little
13 bit about your qualifications on this subject matter. I
14 said we would talk about your education.

15 MR. JONES: Can we go to Slide 2?

16 Q. (By Mr. Jones) Can you describe to the jury
17 your educational background?

18 A. Yes, sir. As was mentioned, I graduated from
19 Lindale High School and then I attended Baylor
20 University and received a Bachelor's degree in
21 mathematics and then Rice University and received a
22 Ph.D. in economics.

23 Q. Now, with regard to economics, have you taught
24 with regard to that subject?

25 A. Yes, sir, I have.

1 Q. Please describe your teaching experience.

2 A. Yes, sir. For -- for 17 years, I was on the
3 faculty at Baylor and went through the ranks you go
4 through, assistant professor, associate professor, full
5 professor, and I was also given a couple of honorary
6 titles along the way.

7 And at a certain point, my business sort of
8 overtook my ability to -- to spend a lot of time at the
9 university and so I, after that, had an appointment that
10 didn't require a great deal of time at S.M.U. for five
11 years.

12 Q. Thank you, sir.

13 I believe when we did voir dire in this case,
14 we heard a little bit about a radio program?

15 MR. JONES: Could we go to Slide 3?

16 Q. (By Mr. Jones) Can you tell us a little bit
17 about your radio program and what it's about?

18 A. Yes, sir. I have a daily radio program on the
19 Texas State Network which is on stations all over Texas,
20 about 130 stations, I think, and it's just a commentary
21 on whatever is going on in the news that day.

22 MR. JONES: If you could, take that slide
23 down.

24 Q. (By Mr. Jones) Do you have an economic
25 consulting firm, sir?

1 A. I do, yes, sir.

2 Q. And how long have you worked as an economic
3 consultant?

4 A. Well, we actually incorporated the Perryman
5 Group in 1985, but I had been working as a consultant
6 quite a while before that.

7 Q. So it would go back 20 or 30 years; fair
8 enough?

9 A. Better than that.

10 Q. Do you work for government entities?

11 A. Yes, sir, I do.

12 Q. And do you have many repeat clients, sir?

13 A. Yes, sir, I do.

14 Q. Have you worked for Intel before?

15 A. I have, yes, sir.

16 Q. On how many occasions?

17 A. Oh, four or five, I think, something like
18 that.

19 Q. Have you ever testified for Intel?

20 A. This is the first time.

21 Q. Okay. And have I had the privilege on one
22 other occasion to ask you questions, sir?

23 A. Yes, sir, you have.

24 Q. Thank you, sir.

25 Now, as an economist, have you worked on

1 patent cases like this before?

2 A. I have, yes, sir.

3 Q. And can you tell us about that experience?

4 A. Sure. Going back 25 years or so, I have
5 probably worked on 25 or 30 patent cases and testified
6 in court maybe 7 or 8 times, something like that.

7 Q. Thank you, sir.

8 MR. JONES: And could we go to -- I
9 believe it's the next slide, Slide 5?

10 Q. (By Mr. Jones) Could you tell us about some of
11 the areas that you have dealt with in those patent
12 cases?

13 A. Sure. The basic process, as you've heard, is
14 figuring out what the technology is worth in the
15 marketplace, what an appropriate compensation would be.

16 So you use essentially the same techniques no
17 matter what the industry.

18 So I have been privileged to work in a lot of
19 industries, telecommunications, oil and gas, lighting
20 controls, pharmaceuticals, a variety of things.

21 Q. Thank you, sir.

22 MR. JONES: And we can take that down
23 now.

24 Q. (By Mr. Jones) Now, are you paid for this
25 work?

1 A. I am, yes, sir.

2 Q. And have you been paid for this work in all of
3 the patent cases you've just told us about?

4 A. Yes, sir, I have.

5 Q. Are you being paid for your work in this
6 particular case?

7 A. Yes, sir, I am.

8 Q. And how much -- what's your rate? What are
9 you charging, sir?

10 A. \$750 an hour.

11 Q. Now, are you the only economist that will
12 testify in this case?

13 A. Yes, sir.

14 Q. Why is it important to have an economist
15 evaluate the issues that we're talking about in this
16 case?

17 A. Well, the issues we're talking about are
18 fundamentally economic issues. Economists study
19 markets, consumers, producers, governments; and
20 basically, we're trying to determine what's the
21 appropriate market value for this technology and what
22 the market would tell us it's worth.

23 And then we also study negotiations, because a
24 lot of economics involves labor and management
25 negotiations or trade agreements among countries or

1 patent agreements for contracts or whatever.

2 So all these things really are -- are in the
3 wheelhouse of what economists do.

4 Q. Thank you, sir.

5 Now let's turn our attention from your
6 qualifications to what you've done in this case. What
7 have you been asked to do in this case, sir?

8 A. Well, I've been asked to determine the
9 appropriate compensation if the patents are found to be
10 valid and infringed.

11 Q. Now, when we talk about the appropriate
12 compensation, with regard to license agreements, are
13 there two common forms that this compensation can take?

14 A. Yes, sir.

15 Q. Describe those two forms to us.

16 A. One of them is called a lump sum, and it's
17 just a one-time payment. You pay, and then you -- you
18 bought the rights to use the technology.

19 The other one is what's called a running
20 royalty, and that one is usually charged as a certain
21 number of cents or a certain percentage, or whatever,
22 per unit.

23 Q. We've seen a number of licenses in this case
24 that have been talked about. With regard to those
25 licenses, were a lot of them lump sums? Have we heard

1 that word, lump-sum royalty payment or lump-sum
2 balancing payment?

3 A. Yes, sir. That's the most general practice in
4 the industry.

5 Q. Now, what form of payment do you believe would
6 be applicable in this case based upon the conclusions
7 you've reached?

8 A. Well, I've calculated both, but I believe the
9 lump sum would be the most appropriate, most likely
10 outcome of the negotiation.

11 MR. JONES: Now, could we go to Slide 6?

12 Q. (By Mr. Jones) What conclusion did you reach
13 about the appropriate measure of damages, the
14 appropriate measure of compensation in this case for
15 these five patents?

16 A. It would be 0.9 cents, almost a penny per
17 unit.

18 Q. And the total figure?

19 A. The total was almost \$1.5 million for all the
20 Defendants.

21 MR. JONES: Now, if we could, if we could
22 go to Slide 7.

23 Q. (By Mr. Jones) Does this show what it would be
24 on a per-Defendant basis?

25 A. Yes, sir, it does.

1 Q. Thank you, sir.

2 MR. JONES: Then if we could go to the
3 next slide.

4 Q. (By Mr. Jones) Does this slide, Slide 8, show
5 us a comparison between your rate and Mr. Bone's rate?

6 A. It does, yes, sir.

7 MR. JONES: And then finally, if we could
8 go to Slide 9.

9 Q. (By Mr. Jones) Does this show you a comparison
10 of your figures -- damages figures to his damages
11 figures?

12 A. Yes, sir.

13 Q. Now, I would like to ask this: When we look
14 at Slide 9, why is there a spot where you have written
15 in a figure for Intel, and it's blank with regard to
16 Mr. Bone?

17 A. Well, since Intel became a party in the case,
18 what I did was, if the chip in the device that we're
19 talking about that's accused was an Intel chip, I
20 attributed that amount to Intel.

21 If it wasn't, I -- I attributed it to the --
22 the other Defendants who have presumably bought their
23 chips from someone else.

24 Mr. Bone didn't do that. He -- he only
25 focused on the Defendants themselves. Hence, the Intel

1 units got lumped into his others.

2 Q. Now, continuing to keep our attention on this
3 chart, is this an apples-to-apples comparison? When we
4 look at his figures and your figures, are we comparing
5 the same things?

6 A. No, sir, we're not.

7 Q. And explain why not, sir.

8 A. Well, as I think I mentioned, mine are a lump
9 sum. Pay it once and -- and you've bought the right to
10 use the technology.

11 Mr. Bone's figures are only up to the date --
12 up to the date of trial or up to a very recent date,
13 what it is thus far, and they would continue to go on in
14 the future and become larger.

15 Q. So his figure of 50 cents per unit, if that
16 was the outcome of the hypothetical negotiation that you
17 analyzed, the negotiation would have resulted in that
18 figure being paid into the future; is that right?

19 A. Yes, sir.

20 Q. Thank you, sir.

21 Now, would you agree -- Mr. Bone said there
22 was a huge difference between your figures and his
23 figures. Would you agree with him on that?

24 A. That I would certainly agree with, yes, sir.

25 Q. He also said that it wouldn't be fair to just

1 split the difference. Would you agree with him on that?

2 A. Absolutely, I would.

3 Q. And why is that?

4 A. Well, obviously, we -- we have come up with
5 completely different types of analyses, even though we
6 used the same basic structure, and a completely
7 different set of numbers; and obviously, one of us is
8 right, and one of us is wrong.

9 Q. Now, I would like to do two things here today.
10 I'd like to discuss with you the economic evidence you
11 see in this case that is important to determine who's
12 right and who's wrong; and then, secondly, I'd like you
13 to describe how you calculated the appropriate damages
14 in this case.

15 Can you do both of those things?

16 A. Certainly, yes, sir.

17 Q. The first economic evidence I want to zero in
18 on is the price of the chips, the price of the Wi-Fi
19 chips, the 802.11n chips we've been talking about in
20 this case.

21 Now, in the year this lawsuit was filed, 2010,
22 what was the average price of these chips?

23 A. About \$2.41.

24 Q. Now, the first thing I'd like to do is talk to
25 you about why that might be important.

1 Have you reviewed the expert reports in this
2 case from the liability experts?

3 A. I have, yes, sir.

4 Q. Both sides?

5 A. Yes, sir.

6 Q. Have you reviewed their deposition testimony?

7 A. Yes, sir, I have.

8 Q. Both sides?

9 A. Yes, sir.

10 Q. Have you also been here for the trial and
11 listened to the testimony?

12 A. I have, yes, sir.

13 Q. Now, where is the patented technology
14 applicable to these five patents located as a result of
15 the testimony that you've seen and the evidence you've
16 seen in this case?

17 A. Well, everything I've seen from the experts,
18 even from -- from Ericsson personnel, has indicated that
19 the -- that the technology resides on the chip.

20 Q. Now, did the Plaintiffs' expert himself say
21 that what was at issue in this case is the chip?

22 A. Yes, sir, he did.

23 Q. Okay. Now, what is the concept that you
24 economic experts deal with in cases like this of the
25 smallest saleable unit? What is that concept all about?

1 A. Yes, sir. That's a concept, a phrase I think
2 the courts have given us in the last few years, but it
3 makes a lot of sense economically, too.

4 It says that when you invent something and
5 you're trying to figure out what it's worth, whatever
6 the smallest device is that you can buy that has that
7 technology embedded is the price you should use, because
8 whatever the technology's worth, it has to be some
9 portion of -- of what you can pay to buy that
10 technology.

11 Q. Thank you, sir.

12 So that concept is important and focuses us on
13 the chip, correct?

14 A. Yes, sir, it does.

15 Q. Now, I asked you the average price of the
16 chip, and I gave you a time period. I said 2010. Is it
17 important, if I ask you that question, that I give you a
18 time period, Dr. Perryman?

19 A. Absolutely, yes, sir.

20 Q. Why is that important? Why is it important
21 that I put that in my question?

22 A. Well, these -- these chips have different
23 prices at different times. What happened when they
24 first started coming out 10 years ago or so, it was
25 pretty expensive at first.

1 Like when computers first came out, they were
2 kind of expensive or a new kind of television or
3 whatever, and then the price drops very, very rapidly.

4 And in the case of these chips, not only has
5 the price dropped very rapidly and continues to drop,
6 but -- but also the chips keep having more stuff on
7 them. They keep being better.

8 Q. Thank you, sir.

9 Now, with regard to the products the chips go
10 into, have those prices dropped, also?

11 A. Oh, absolutely, yes, sir.

12 Q. Now, do the prices of these chips vary today?

13 A. Yes, sir, they do.

14 Q. And have they always varied?

15 A. Yes, sir, they have.

16 Q. How low can the prices of these Wi-Fi chips
17 go?

18 A. Well, I suspect they'll go even lower in the
19 future, but I know that Broadcom, the leader in the
20 market, has a chip out for \$1.18. And Mr. McFarland was
21 saying the other day that Atheros -- he said: It's
22 really cool technology, but we can only sell it for a
23 dollar. So I know there are chips right around that
24 range.

25 Q. Now, we -- we know that we have the economic

1 evidence of the price of this chip at the time the suit
2 was filed was 2.41. Now, the chip prices go as low as
3 \$1.18 for Broadcom chips.

4 Now, if we take that piece of evidence, as an
5 economist, can you tell me, does it make economic sense
6 that a chip that would cost as low as \$1.18 would pay a
7 royalty for one patent holder of 50 cents?

8 A. No, sir, it doesn't.

9 Q. Why not?

10 A. Well, as we've heard, there's thousands of
11 patents in these -- in these chips. There's a lot of
12 technology in them. We know that the chip makers are
13 the ones that hold most of the technology.

14 So you're looking at a fairly minor set of
15 technology here and saying it has to pay -- roughly
16 40 percent of the -- of the price of the chip has to go
17 to royalties for that one patent holder, well, very
18 quickly, you get to the point where you couldn't sell
19 the chips.

20 Q. Now, you've heard the testimony in this case
21 of the 802.11 people that were there, Mr. Kitchin; and
22 he testified that one of the goals when developing the
23 802.11n standard for Wi-Fi was affordable, inexpensive
24 Wi-Fi.

25 How would a royalty rate of 50 cents for one

1 patent holder relate to that goal?

2 A. Well, it would make it impossible to achieve
3 that, because -- because it's -- it's an enormous
4 percentage of what the current price is.

5 Q. Now, whose opinion does this piece of economic
6 evidence, the price of these chips, support with regard
7 to their opinions? Does it support your opinion, or
8 does it support Mr. Bone's opinion?

9 A. The price evidence would support my opinion,
10 yes, sir.

11 Q. Thank you, sir.

12 MR. JONES: Your Honor, at this time, I
13 need to go into confidential information as we've done
14 before.

15 THE COURT: All right. If you weren't
16 here last week, let me tell the audience, if you're not
17 covered -- and you would know if you are -- if you're
18 not a party to the protective order that has been
19 entered in this case, then you are going to need to
20 leave the courtroom during this testimony, and we're
21 going to seal the courtroom.

22 When they get through with this
23 testimony, we will unseal it, and you can return.

24 So if you're in the audience or in the
25 courtroom and you are not a party to the protective

1 order or covered by the protective order that's been
2 entered in this case, please leave the courtroom at this
3 time.

4 (Courtroom sealed.)

5 (Pause in proceedings.)

6 (This is Sealed Portion No. 6 and is
7 filed under separate cover.)

8 (Courtroom unsealed.)

9 Q. (By Mr. Jones) At this time, I'd like to look
10 at a final piece of economic evidence, the economic
11 evidence of the fact that the chip makers own the
12 majority of the 802.11n patents.

13 Now, how do you know that, sir?

14 A. Well, I talked to a lot of experts about this,
15 and -- including people who were at the negotiations,
16 the people who were actually involved in developing
17 and -- the early technology; and they all indicate that
18 the -- the chip makers drove the process and developed
19 most of the technology. And it's pretty well-known in
20 the industry. I mean, even Ericsson recognizes it.

21 Q. Now, you said even Ericsson recognizes it.

22 MR. JONES: Let's go to Slide 18,
23 Defendants' Exhibit 81.

24 Excuse me, Slide 16. I said the wrong
25 slide.

1 Q. (By Mr. Jones) This is Defendants' Exhibit.
2 Here is a document. It's a WLAN strategy document from
3 Ericsson, and they say in this particular document that
4 the wireless patents are mainly held by chipset
5 suppliers, right, sir?

6 A. Yes, sir.

7 Q. Is that statement in accord with your
8 findings, too, from all the work you've done in this
9 case?

10 A. Yes, sir, it is.

11 Q. What effect would the fact that most of the
12 wireless patents were held by the chip makers have on
13 your analysis of this hypothetical or pretend
14 negotiations?

15 A. Well, it tells me I'm dealing with -- with
16 products that sell for 2 or 3 dollars, in some cases
17 less, and that most of the technology is already --
18 basically being paid for because the chip makers tend to
19 cross-license each other and say you use your tech -- my
20 technology, I'll use yours, maybe a balancing payment;
21 but they do that and then they can all make use of that
22 to make the products.

23 And -- and they're compensated for their --
24 for their billions of dollars they invest in
25 intellectual property by -- by -- by these dollars and

1 \$2 that come in for their -- for their chips.

2 And so that's where the intellectual property
3 is being paid for, and that's where most of the
4 intellectual property resides.

5 Q. Now, who does this piece of economic evidence,
6 which really is undisputed, is -- is it not, sir, who
7 does it support, you or Mr. Bone's opinions?

8 A. Again, it would support my analysis.

9 Q. Now, I'd like to turn us from talking about
10 this economic evidence and then conclude by discussing
11 with you how you actually calculated your figures.
12 Like Mr. Bone, did you analyze a hypothetical
13 negotiation?

14 A. I did, yes, sir.

15 Q. Like Mr. Bone, did you analyze all of the
16 Georgia-Pacific Factors?

17 A. I did, yes, sir.

18 Q. And like Mr. Bone, did you assume that the
19 patents were valid and infringed?

20 A. Yes, sir.

21 Q. And, in fact, you, like Mr. Bone, have no
22 opinion whatsoever on the issue of either infringement
23 or validity; is that fair?

24 A. That's correct, yes, sir.

25 MR. JONES: Now, if we could go to Slide

1 17.

2 Q. (By Mr. Jones) And, in fact, if those
3 assumptions that both of you made are not true, then the
4 damages in this case are zero; fair enough?

5 A. That's correct, yes, sir.

6 Q. Okay. Now, what did you use as the price of
7 the clip for the purposes of your royalty calculations,
8 sir?

9 A. I used the average price at the time the
10 lawsuit was filed.

11 Q. Which would be the \$2.41 we talked about?

12 A. Yes, sir.

13 Q. Where did that figure come from, sir?

14 A. It came from an industry study by a group
15 called ABI, which is a very well-regarded group that
16 studies the industry on an ongoing basis.

17 Q. Now, full disclosure -- some chips sell more
18 than that -- in fact, Intel has chips that sell more
19 than that, right?

20 A. That's correct, some more, some less. If you
21 do -- if you do the math based on the average, then
22 you're going to be right on the average.

23 Q. Thank you.

24 And they can go as low, you said, as the
25 Broadcom chip in this case of a dollar and 18 cents; is

1 that correct?

2 A. That's correct, yes, sir.

3 Q. Now, do these chips -- these Wi-Fi chips have
4 more functionality and technology on them than merely
5 what is claimed by the technology of these five patents?

6 A. Oh, yes, sir, considerably.

7 Q. Okay. And is that undisputed?

8 A. Yes, sir, that's undisputed.

9 Q. Now, what do you as an economist do when you
10 evaluate what should be paid for a royalty when there is
11 more technology on that chip than merely the five
12 patents' technologies?

13 A. Well, it's a concept we call apportionment,
14 and what it basically means is try to separate out of
15 all the technology that's there what portion of it is a
16 result of these -- of these five patents and what would
17 be appropriate compensation for that.

18 Q. Now, are you trying to figure out what would
19 be the fair part of that \$2.41 price that should go for
20 the technology of the five patents-in-suit?

21 A. Yes, sir.

22 Q. Okay. Now, we talked about that --

23 MR. JONES: Could we bring up Slide 18,
24 please?

25 Q. (By Mr. Jones) We talked about the fact that

1 Wi-Fi chips have many functionalities besides 802.11; is
2 that right sir.

3 A. Yes, sir.

4 Q. And, of course, this information you're
5 getting from the liability experts, their testimony,
6 their depositions, and documents; fair enough?

7 A. Absolutely, yes, sir.

8 Q. So, for example, if we look at just one Wi-Fi
9 chip here, this is with regard to Atheros -- an Atheros
10 chip, there's going to be a data sheet that will tell us
11 all about the technologies and functionalities of that
12 particular chip, right, sir?

13 A. Yes, sir. A lot of stuff on the chip.

14 Q. And this is in evidence in the case as
15 Defendants' Exhibit 47 -- 477. There are data sheets on
16 these chips, right?

17 A. Yes, sir, there are.

18 Q. And they're going to discuss all the things
19 they do, right?

20 A. Yes, sir.

21 Q. And certainly this here is just some major
22 features that don't relate to these patents; it's not a
23 complete list in any shape, form, or fashion?

24 A. Right. These are just some major ones that
25 the technical folks told me about when I asked them.

1 Q. Thank you, sir. I appreciate it.

2 Now, when we look at these particular
3 chips and we're trying to do this apportionment, how did
4 you go about apportioning the technologies that relate
5 to other things on this chip besides 802.11? How did
6 you go about doing that?

7 A. Well, in that case, what I did was, I talked
8 to one of the technical experts, a gentleman by the name
9 of Dr. Matt Shoemake who was -- he's a TI engineer, he
10 was chairman of one of the 802.11 standards boards, he's
11 built and designed chips, very knowledgeable guy. And I
12 asked him to walk me through what part of the chip is
13 802.11 and what part of it is other things.

14 MR. JONES: And could we go to Slide 19?

15 Q. (By Mr. Jones) And what did he tell you about
16 this when you talked to him about it, and what -- he
17 also put this in his report?

18 A. Yes, sir, he did.

19 Q. Thank you, sir.

20 A. Yeah, it's in his report, and he -- he
21 indicated that about 35 percent of the technology on the
22 chip is actually 802.11 technology of some sort.

23 Q. Now, we've now apportioned down to the 802.11
24 technology.

25 Do -- do these chips -- when we look at 802.11

1 technology, is there more 802.11 technology than just
2 what concerns what we're dealing with in this case,
3 802.11n?

4 A. Yes, sir.

5 MR. JONES: And could we go to Slide 21?

6 Q. (By Mr. Jones) What does -- what does this
7 show us about that subject matter?

8 A. Well, basically the --

9 MR. JONES: Next slide, please. Perfect.
10 We'll just stay on that one. Thank you so much.

11 A. I think I need the other one actually.

12 Q. (By Mr. Jones) Okay. Go ahead. All right.
13 Sorry.

14 A. Yeah. Well, the first thing that -- or the
15 other thing I was told by the technical folks is that at
16 most, half of what 802.11 is is actually 802.11n. And
17 so I took my 35 percent and I cut it in half and that
18 would be the most of the chip that would actually be
19 802.11n technology.

20 Q. Thank you, sir.

21 Now, so -- so you apportioned down to 17. --
22 17.5 percent for 802.11n technology?

23 A. That's correct.

24 Q. Let's go back and let's talk about why you had
25 to do that. Make sure we understand this step.

1 MR. JONES: Could we go back to the
2 previous slide -- or go back -- excuse me, Slide 21.

3 Yes, thank you.

4 Q. (By Mr. Jones) Let's talk about this slide
5 which tells us why we had to do it.

6 A. Sure.

7 Q. Now --

8 A. Well -- I'm sorry.

9 Q. Okay. Let me ask a question and then you take
10 off on it.

11 What does -- what is there included in 802.11n
12 that does not concern the five patents-in-suit, based
13 upon you're talking to the liability experts?

14 A. Well, there's -- there's a lot of things that
15 go into 802.11n once you get down to what piece of it
16 that is. And there's a list here of some of the major
17 things they've told me.

18 One, the MIMO is the thing that gave it a lot
19 of speed and throughput. That's -- I think that's the
20 major secret sauce in 802.11n, as far as an advancement.

21 The 20 and 40 megahertz channels were very
22 important, the traffic management.

23 But, anyway, there's a lot of different things
24 in there. And the two that -- that we've highlighted in
25 yellow here, quality of service and block

1 acknowledgement, are the two pieces that Ericsson's
2 patents are alleged to have some impact on.

3 Q. Now, we have heard testimony in this case,
4 haven't we, about the extent of the use of the patented
5 technologies of these five patents of what Ericsson
6 claims applies to this. We've heard testimony about the
7 extent of that use, haven't we?

8 A. We have, yes, sir.

9 Q. Okay. For example, did Duncan Kitchin testify
10 that there were at least 70 features related to 802.11n?

11 A. Yes, sir.

12 Q. Did he testify to that?

13 A. Yes, sir, he did.

14 Q. And, of course, the two here that we see we've
15 highlighted in yellow dealing with these fat -- five
16 patents is block acknowledgement and quality of service,
17 correct?

18 A. Yes, sir.

19 Q. Did -- did Dr. Gibson testify that his testing
20 showed that block acknowledgement requests, BAR's frames
21 are rarely used?

22 A. Yes, sir.

23 Q. Did he also testify that his testing showed
24 that quality of service is not used when 802.11n is in
25 its normal configuration?

1 A. Yes, sir, he did.

2 Q. Okay. Now, you've listened to that, but then
3 you've relied --

4 MR. JONES: If we could go back to Slide
5 20.

6 Q. (By Mr. Jones) -- you've relied upon the
7 technical experts to separate all that out for you; fair
8 enough?

9 A. Yes, sir. Yes, sir.

10 Q. Thank you, sir.

11 Let's move on.

12 So after you got this 17.5 percent figure,
13 what did you do next?

14 A. Well, the next thing I did was -- was try to
15 get some indication of what percentage of the 17.5
16 percent was Ericsson's technology.

17 Q. And in order to do that --

18 MR. JONES: Could we go to Slide 22?

19 Q. (By Mr. Jones) Now, did you know that there
20 were other companies out there that had 802.11 patents
21 besides Ericsson?

22 A. Oh, yes, sir. The examples here are all chip
23 makers, and they have the bulk of the technology.

24 Q. And there are other patents out there besides
25 the five that we're dealing with, right, sir?

1 A. Oh, yes, sir.

2 Q. And these are just the chip makers that we see
3 here?

4 A. That's correct.

5 Q. Okay.

6 A. Yes, sir.

7 MR. JONES: If we could go to Slide 23.

8 Q. (By Mr. Jones) How did you analyze the portion
9 that was Ericsson's?

10 A. Well, I did a few things, given the
11 information we had to work with. One was there were a
12 total of 32 letters sent by companies -- letters of
13 assurance sent by companies specifically for 802.11n.

14 Some of the older ones still applied, but just
15 specific for 802.11n, Ericsson was one of those
16 companies.

17 And if you think that's -- they're about an
18 average company which some of this evidence would
19 suggest to the contrary; but if you assume that, you get
20 3.1 percent, roughly.

21 I also looked at the allegedly covered
22 patents, and I said -- and I did this very
23 conservatively. I took the average number that were
24 disclosed in these letters, and it turned out to be
25 about 6 or 7. Most of the letters don't disclose how

1 many and list them because most of them are people like
2 Intel and Broadcom that have a lot of patents.

3 So this is a very conservative number, but I
4 came up with 233. I took the 8 that Ericsson said that
5 they had, which would give me a 3.4 percent number.

6 Q. Now, with regard to 802.11, do we see that in
7 this column immediately to the left of the one you've
8 just been talking about?

9 Do we see that there were 121 companies
10 that -- that -- that sent letters of assurances
11 concerning 802.11, collectively, right?

12 A. Yes, sir. And they sent 274 letters. If I
13 had gone by -- on that basis, Ericsson only sent two, it
14 would be less than 1 percent. But I -- again, I tried
15 to be conservative in favor of Ericsson in doing this.

16 Q. And then you -- you saw there were 274 letters
17 of assurances applicable to 802.11?

18 A. Correct, yes, sir.

19 Q. And there were 977 patents that you calculated
20 as a minimum that were applicable to the 802.11 standard
21 in toto; is that fair?

22 A. Yes -- yes, sir. There's a lot more than
23 that, but that's -- that was our conservative estimate.

24 Q. Now, did you consider any other evidence on
25 this particular point, and with -- in that regard, I'm

1 referring specifically to the tech IP study?

2 A. I did, yes, sir.

3 Q. And what did you learn from that study?

4 A. Well, the tech IP study is -- is an industry
5 study that sought to identify 802.11 patents for the top
6 12 technology holders in the industry. And they came up
7 with a total of almost 1500 patents in -- in that group.

8 Ericsson was not one of the top 12. But TI
9 was No. 12, and they had 44 patents.

10 So I said what if Ericsson had 43. I mean,
11 they've only told us about eight, but I said I'm going
12 to give them the benefit of the doubt. They just missed
13 getting in the report. They -- 44 got in the report. I
14 said, if you assume they have 43, then the percentage
15 there is about 2.9 percent.

16 And so that gave me another indicator that if
17 I make conservative assumptions, I end up at around 3
18 percent every time.

19 Q. And we know in actuality from the testimony in
20 this case that they only claimed to have 8, right, sir?

21 A. That's correct, yes, sir.

22 Q. Thank you, sir.

23 MR. JONES: Now, if we could go to Slide
24 24.

25 Q. (By Mr. Jones) Taking all of this information

1 together, what percentage did you come up with for
2 Ericsson's total share of 802.11n intellectual property
3 rights?

4 A. It was about 3 percent of the total.

5 Q. Then what did you do next in your calculations
6 of your figures?

7 A. We have one more step here. That was for the
8 eight patents. There's only five in this case, so I had
9 to adjust for that.

10 MR. JONES: Could we go to Slide 25?

11 A. Yes, sir. And even though it's a little -- I
12 was generous here. I gave 75 percent for the five
13 patents. That's actually -- it's actually less than 75
14 percent. But if I do that and take 75 percent of the 3
15 percent, I'm left with the patents-in-suit representing
16 2.25 percent of the 802.11n portion of the chip.

17 Q. (By Mr. Jones) So now after you came to this
18 conclusion about the apportionment and the economic
19 terms, the fair share for the patented technology of
20 these five patents, did you then use that information to
21 determine your rate and your damages figures?

22 MR. JONES: Could we go to Slide 26?

23 Q. (By Mr. Jones) And could you show us how you
24 did that?

25 A. Yes, sir. And it's down to pretty simple

1 multiplication now; but first of all, I start with 2.41,
2 the price of the chip.

3 Now, that's conservative because that says you
4 could use all of the price of the chip just to pay for
5 technology. And obviously, they have to make it, they
6 have to ship it, they have to market it, they have to do
7 a lot of things.

8 But I assume if we could take the entire \$2.41
9 times the 17.5 percent that is actually 802.11n times
10 the 2.25 percent, which is Ericsson's portion of that,
11 and that would tell us that the market is -- is
12 rewarding the -- or would reward the Ericsson technology
13 with at most, 0.9 cents.

14 Q. Now, if you use that .9 cents and you apply it
15 to the sales and projected sales of these Defendants, is
16 that how you came up with your damages lump-sum payment
17 that you've calculated, sir?

18 A. Yes, sir, it is.

19 Q. Thank you, sir.

20 Let's go back -- we'll kind of end where we
21 started out.

22 MR. JONES: Let's go back to Slide 9 to
23 this comparison.

24 Q. (By Mr. Jones) Now, you've told me that
25 there's a big difference -- we all can see that. You've

1 told me that it's not fair to split the difference.

2 Let me ask you this: Did Mr. Bone say in his
3 report and his testimony the lowest rate that he thought
4 would be reasonable or a RAND rate concerning Intel?

5 A. He did not address Intel, no, sir.

6 Q. Okay. Did he say what the lowest rate would
7 be for these five patents-in-suit that would be
8 reasonable?

9 A. Yes, sir, he did.

10 Q. And what was that rate?

11 A. He said it could be as low as 25 percent for
12 some products.

13 Q. And was that 25 --

14 A. 25 cents --

15 Q. -- cents --

16 A. -- I'm sorry.

17 Q. -- or 25 percent?

18 A. -- 25 cents, I'm sorry.

19 Q. Now, if you use the lowest rate that he said
20 would be reasonable, not the 50-cent rate, because he's
21 told us 25 cents could be -- could be reasonable. If
22 you use that rate, what does it do to his figures?

23 A. Well, it cuts them in half, but they're still
24 very, very large figures.

25 Q. Thank you, sir.

1 Now, let me ask you this: You know, you've
2 provided an economic analysis, and I appreciate that.

3 MR. JONES: You can take this slide down
4 now.

5 Q. (By Mr. Jones) You've provided an economic
6 analysis for you about who's right. What does your
7 common sense tell you about who's right in this case?

8 A. Well, hopefully most of the time economics and
9 common sense come together. I hope so. But I think
10 anybody's common sense would tell you that -- that you
11 simply can't pay 50 cents a unit on a product that's
12 going to sell for a dollar, \$2, and the prices are
13 dropping over time. That -- you just -- it's just not
14 sustainable for one very, very small piece of what is a
15 lot of technology.

16 Q. Thank you, sir. I appreciate your time.

17 MR. JONES: I pass the witness, Your
18 Honor.

19 THE COURT: All right.

20 Cross-examination.

21 CROSS-EXAMINATION

22 BY MR. CAMPBELL:

23 Q. Good morning, Dr. Perryman.

24 A. Good morning.

25 Q. I don't think we've met before. My name is

1 John Campbell. I'm an attorney representing Ericsson.

2 I have a few questions for you.

3 A. My pleasure. Thank you, sir.

4 Q. I understand that you made some conservative
5 assumptions in favor of Ericsson and came up with almost
6 a penny for a royalty; is that right?

7 A. That's correct, yes, sir.

8 Q. Okay. Now, let's talk about your calculation
9 of the royalty rate and the assumptions you've made.
10 We've got a number of the patents -- licenses
11 to the patents, but you rely on a number of assumptions
12 to calculate your almost a penny, correct, sir?

13 A. Well, I did the appropriate economic
14 apportionment type analysis. I also analyzed the
15 licenses that I found and that Mr. Bone found.

16 Q. Okay, sir. That wasn't my question. My
17 question was: You rely on a number of assumptions to
18 come up with your almost-a-penny rate, correct, sir?

19 A. Certainly there are assumptions involved that
20 favor Ericsson, yes, sir.

21 Q. Was the answer yes, you relied on a number of
22 assumptions?

23 A. I thought I said, yes, sir.

24 Q. Okay. I -- I just want to make sure.

25 Now, I'm not talking about the assumption of

1 infringement and validity. You made that assumption,
2 correct, sir?

3 A. Yes, of course.

4 Q. And Mr. Bone made that assumption, correct,
5 sir?

6 A. Yes, sir, he did.

7 Q. That's -- that's required, right?

8 A. Absolutely, yes, sir.

9 Q. Okay. You assumed that 35 percent of the chip
10 relates to 802.11n -- or 802.11, correct, sir?

11 A. Well, honestly, I wouldn't call that an
12 assumption. The folks who design and build these chips
13 walked me through a process and -- and told me that's
14 what the answer was.

15 Q. Okay. Well, you filed a number of reports in
16 this case, correct, sir?

17 A. Yes, sir.

18 Q. Okay. Let's look at your report at Page 201.

19 And you say: Based on the opinion of Dr.
20 Matthew Shoemake and focusing solely on apportionment of
21 the technology, I make a conservative assumption that
22 about 35 percent of the chip's component value is
23 attributable to 802.11 technology value contributions.

24 Is that your report, sir?

25 A. Yes, sir, based on -- on what Dr. Shoemake

1 told me, that's absolutely correct.

2 Q. Okay. You also make an assumption that half
3 of the 802.11 technology is attributable to 802.11n,
4 right, sir?

5 A. Again, based on what the experts tell me, yes,
6 sir.

7 Q. Okay. You also made an assumption that
8 Ericsson's patents are average patents, correct, sir?

9 A. They were -- that they were typical patents
10 which -- which from what I've heard from the experts, is
11 also a conservative assumption; but, yes, sir.

12 Q. You -- you testified that you assume they're
13 average patents, right, sir?

14 A. Yes, sir, absolutely.

15 Q. Okay. And -- and you also made an
16 assumption --

17 MR. CAMPBELL: So if I can bring up the
18 slides here I was supposed to be using.

19 Q. (By Mr. Campbell) You also made -- so we've --
20 we've got the -- the assumed value of 802.11 -- the
21 assumed value of 802.11n. You also made an assumption
22 to calculate the total number of standard essential
23 patents, correct, sir?

24 A. Well, I used several different methods. It
25 all came out with about the same number. If you want to

1 call that an assumption, I guess you could.

2 Q. Okay. And then finally, you assumed the
3 value -- the relationship of the patents-in-suit to
4 Ericsson's patent portfolio, correct, sir?

5 A. Again, based on what the technical experts
6 told me, yes, sir.

7 Q. Okay. And actually there's one last
8 assumption here. There's an assumption that the value
9 is limited by the price of the 802.11 -- or by the
10 chipset -- the value of the chipset in 2010, correct,
11 sir?

12 A. That's the smallest saleable unit, yes, sir.

13 Q. That's an assumption.

14 Okay. So let's talk about those -- that --
15 that first assumption, the value of the 802.11 chip,
16 okay?

17 A. Yes, sir.

18 Q. The value you used is from a third-party
19 report, correct, sir?

20 A. That's correct, yes, sir.

21 Q. And it is the worldwide price, correct, sir?

22 A. I believe that's correct, yes, sir.

23 Q. As you explained with your counsel, we're
24 dealing with U.S. patents here, right?

25 A. That's correct, yes, sir.

1 Q. Okay. And the value you used is from 2010,
2 but you agree with Mr. Bone, the hypothetical
3 negotiation would take place in 2007, correct, sir?

4 A. It would, yes, sir.

5 Q. And -- and you understand the law says we
6 focus on that hypothetical negotiation date, correct,
7 sir?

8 A. Yes, sir.

9 Q. Okay. And in 2007, in the first quarter, the
10 price of an Intel 802.11 chip was \$28.72, correct?

11 A. That certainly wouldn't be the average price
12 of all the chips. There may have been some Intel chips
13 with other technology on them that sold for that much.
14 I'll take your word for it.

15 Q. You'll take my word for it that Intel's
16 802.11n chips at the date of the hypothetical
17 negotiation sold for \$28.72, correct?

18 A. More than likely it was a chip module that
19 includes a lot of other things on it. That's usually
20 what Intel sells. But if you tell me Intel was selling
21 chips for \$28 at that time, for purposes of what we're
22 doing here, I'll certainly agree with you.

23 Q. Well, the -- the evidence -- the evidence will
24 be in the record at PX 51.

25 Now, you understand, sir, that in this case

1 the parties have stipulated to when the Defendants knew
2 about these patents. Do you understand that?

3 A. That's my understanding, yes, sir.

4 Q. Okay. And the stipulation is that NETGEAR
5 knew about these patents in the fourth quarter of 2008,
6 correct, sir?

7 A. I -- I don't recall, but I believe that's
8 correct, yes, sir.

9 Q. All right. That's at PX 554.
10 At that time, Intel's average 802.11 chip sold
11 for \$17.02, correct, sir?

12 A. Well, again, Intel sells a module. They don't
13 sell just a chip. I -- and Intel sells at the higher
14 end of the market, but if -- if that was the average
15 price at that time, I have no reason to dispute that.

16 Q. All right. That's at PX 51.

17 Now, Dell knew about these chips in the
18 first -- or these patents in the first quarter of 2010;
19 is that correct, sir?

20 A. That sounds right, yes, sir.

21 Q. Okay. The average price of the Intel modules,
22 as you say -- 802.11n modules at that time was \$15.86,
23 correct, sir?

24 A. I'll take your word for it with -- the module
25 with everything that's on it, yes, sir.

1 Q. Okay. And the price you used is \$2.41, right?

2 A. For just the 802.11 chip, that was the average
3 price, yes, sir.

4 Q. Now, even if we use your worldwide numbers,
5 the "n" chipset was commanding \$10 additional over the
6 prior "g" chip in 2007, correct, sir?

7 A. The first month or -- the first few months it
8 came out, more than likely it did sell at a premium.

9 They usually do for a month or -- for few
10 months, yes, sir.

11 Q. It was commanding a 10-dollar premium,
12 correct, sir?

13 A. Usually the first few units sold do. I -- I
14 don't recall those numbers, but I have no reason to
15 doubt that.

16 Q. Okay. Well, they're in your report, right?
17 If we bring up Page 133, you've got a table that shows
18 the difference in price between the 802.11n chips versus
19 other chips, right, sir?

20 A. Yes, sir. That's what you normally find when
21 they first come out, a little bit of premium, falls very
22 rapidly.

23 Q. It was a 10-dollar premium, correct, sir?
24 Shows there in the third line, n-g, 2007, price
25 difference \$10.04, correct, sir?

1 A. That's correct, yes, sir.

2 Q. Okay. Now, one difference between the "n"
3 chip and the "g" chip is the increased MAC efficiency;
4 is that right?

5 A. I believe that's one of the things the
6 technical experts mentioned.

7 Q. Well, that was mentioned in your report, too,
8 correct, sir?

9 A. If it was -- I'm sure it was; but if it was,
10 it came from the technical folks. I don't know how to
11 build these things.

12 Q. Okay. Well, if we look at Page 167, you say:
13 Overall whereas 802.11n has about a 70 percent MAC
14 efficiency, 802.11g has a 55 percent MAC efficiency,
15 correct, sir?

16 A. Yes, sir, and it's footnoted to some technical
17 person or report.

18 Q. Okay. And you understand, though, as having
19 sat in the courtroom, that the patents in this case are
20 inventions related to the MAC layer, correct, sir?

21 A. I understand that the -- the inventions are --
22 are primarily on the MAC layer, yes, sir.

23 Q. Okay. And now finally, the -- even the
24 third-party report that you rely on, this ABA -- ABI
25 report, in 2007, listed the 802.11n chip was selling for

1 \$13.69, correct?

2 A. When it first came out, that sounds about
3 right.

4 Q. Okay. In any event, if the jury believes the
5 proper reasonable royalty rate is 50 -- rate is 50
6 cents, that would be based on a hypothetical negotiation
7 that took place in 2007, correct?

8 A. Yes, sir.

9 Q. Okay. Now, let's talk about the share of
10 Ericsson's patents. You said that -- I think I wrote
11 this down right -- that there are thousands of patents
12 in these chips, correct, sir?

13 A. Yes, sir.

14 Q. Have you done an analysis to determine the
15 number of patents that are in these chips?

16 A. I haven't done such an analysis. Wouldn't
17 be -- wouldn't be able to. Some of the technical folks
18 have.

19 Q. Okay. The point is you're not aware -- you're
20 not aware of the number of truly standard essential
21 patents in these chips, are you?

22 A. I doubt anyone is truly aware of the exact
23 number, but -- but, again, I -- I've looked at the
24 technical experts, and I didn't use any numbers anywhere
25 close to those thousands to get to my analysis.

1 Q. Okay. Well, let's talk about the numbers you
2 did use.

3 You assumed for purposes of your analysis that
4 Ericsson's patents are standard essential patents,
5 correct?

6 A. Well, it really doesn't matter if they are or
7 not. I apportioned them based on -- on their
8 contribution to the standard. So I guess implicitly I
9 did assume they were essential.

10 Q. Well, you said in your report that you assumed
11 they were standard essential patents, didn't you, sir?

12 A. I -- I don't recall if I did. It shouldn't
13 make any difference because I was getting to the
14 technology that contributes, so it really shouldn't
15 matter one way or the other.

16 Q. You don't recall whether you said that in your
17 report or not?

18 A. I don't, but, again, it -- it doesn't matter.

19 Q. Okay. Now, you know, right, that the -- you
20 relied on the letters of assurance to make your
21 estimates, correct, sir?

22 A. In one -- in one instance, I did, yes, sir.

23 Q. Okay. And you know the letters of assurance
24 don't tell us the actual number of standard essential
25 patents, don't you?

1 A. Normally they don't, particularly with the
2 folks that have quite a few.

3 Q. In fact, Intel's counsel stood up here a week
4 ago today and asked Mr. Brismark to agree that just
5 calling a patent essential doesn't make it essential,
6 correct?

7 A. That's absolutely true, yes, sir.

8 Q. Okay. And he further said it was a fact that
9 many times companies will say their patents are
10 essential and they're not. Do you recall that?

11 A. I have seen evidence of that in other
12 standards, so it wouldn't surprise me.

13 Q. Okay. So you used seven letters of assurance
14 that disclosed specific standard essential patents to
15 estimate the total; is that right?

16 A. Yes, sir, which means I would considerably
17 underestimate it.

18 Q. Okay. And among those seven were disclosures
19 from France, Telecom, a company called TDF, and the
20 Nippon Telegraph & Telephone Corporation; is that
21 correct?

22 A. Yes, sir. The -- the big ones like Intel and
23 Broadcom, they just -- they just say they have
24 technology. They don't get into how many patents.

25 Q. You didn't analyze the patents disclosed by

1 France, Telecom, TDF, or the Nippon Telegraph &
2 Telephone Corporation to see if they were standard
3 essential, did you?

4 A. Oh, I couldn't analyze any patent to see if it
5 was standard essential.

6 Q. You didn't ask one of the technical experts to
7 do that?

8 A. No, sir, I did not.

9 Q. Okay. Now, you used those seven to estimate
10 the number of standard essential patents based on the 25
11 blanket letters of assurance, correct, sir?

12 A. Yes, sir.

13 Q. And among those were disclosures from Hughes
14 Network Systems, Airgo Networks, and Aware,
15 Incorporated, correct, sir?

16 A. Sure. As well as Intel, Broadcom, Atheros, a
17 number of them.

18 Q. And you made no effort to determine the number
19 of patents held by Hughes Network Systems, Airgo
20 Networks, or Aware, Incorporated, did you, sir?

21 A. I did not, no, sir.

22 Q. You made no effort to determine what patents
23 that might be held by these companies are standard
24 essential, did you, sir?

25 A. Oh, not personally, no, sir.

1 Q. Okay. Now, your report cites an article that
2 says only 21.4 percent of the patents that are declared
3 essential are actually essential; is that correct, sir?

4 A. Yes, sir. I don't remember if that was in
5 802.11 report or not, but I have seen that article. And
6 that was, in fact, the basis for answering your other
7 question, that people sometimes declare them essential
8 when they're not.

9 Q. You don't apply that 21.4 percent in your
10 calculation of determining the number of patents in
11 these 802.11 chips, do you, sir?

12 A. Well, they wouldn't be appropriate to do that.
13 I mean, companies like Intel and Broadcom obviously
14 have -- have very, very large numbers of patents.

15 Q. Okay. Now, you understand TechIPm doesn't
16 measure standard essential patents, do -- does it?

17 A. I don't believe it does.

18 Q. In fact, it only counts up 802.11-related
19 patents based on keyword searches, doesn't it?

20 A. The tech IP study, I don't recall. That may
21 be their methodology. I know I've seen studies that
22 just do related patents, but I can't remember with
23 TechIPm. I thought they were trying to do standard
24 essential patents.

25 Q. Well, let's look at it. It's Exhibit 149 at

1 Page 1. And if we zoom in there on the first paragraph,
2 it says, in the last sentence: To find the key IPR,
3 issued patents and published applications, holders and
4 their patent portfolios, semantic method is used for the
5 keyword searching of the global patent databases.

6 Correct, sir?

7 A. Yes, sir, that's what it says.

8 Q. It's using keyword searching, correct, sir?

9 A. Yes, sir.

10 Q. And it's searching world patents, correct?

11 A. Oh, yes, sir --

12 Q. All -- all over the world.

13 A. -- absolutely.

14 Q. It's not limited to the U.S., is it?

15 A. Sure. Yes, sir, absolutely.

16 Q. Okay. Now, you were here yesterday for Dr.

17 Gibson's testimony when he testified that it's his

18 opinion that very little of the 802.11 standard is

19 patented. Were you here for that, sir?

20 A. I did hear him say that, yes, sir.

21 Q. Okay. And he also said he hasn't done an
22 analysis of the IEEE proposals to see what was patented,
23 didn't he?

24 A. Yes, sir.

25 Q. Have you done that analysis, sir?

1 A. I wouldn't be capable of doing that analysis;
2 but, no, sir, I haven't.

3 Q. Okay. Well, now let's talk about -- since --
4 since we haven't done those -- that analysis and trying
5 to make estimates, let's talk about what we know, okay?

6 Instead of trying to drive estimates, let's
7 paint a picture of the PC market.

8 HP is No. 1 in sales -- PC sales in 2010,
9 correct, sir?

10 A. I believe so, yes, sir.

11 Q. Okay.

12 MR. CAMPBELL: If we could bring up the
13 slides here.

14 Q. (By Mr. Campbell) And in 2010, Dell was No. 2,
15 correct, sir?

16 A. That sounds right, yes, sir.

17 Q. Okay. Well, you -- you cite -- you cite a
18 market report in your report that shows that HP had 26
19 percent of the market of PC manufacturers in the second
20 quarter of 2010, correct, sir?

21 A. I have no reason to doubt that.

22 Q. Okay. And Dell had 24 percent at that time,
23 correct, sir?

24 A. I believe so, yes, sir.

25 Q. And Acer had 11 percent at that time, correct,

1 sir?

2 A. Correct.

3 Q. And Toshiba had 9 percent?

4 A. Yes, sir.

5 Q. Apple had 9 percent?

6 A. Yes, sir.

7 Q. Okay. And then a bunch of others -- Mr. Jones
8 says we don't know which ones are in business and they
9 might be out of business and we -- the list isn't --
10 isn't accurate. But all those go in 21 percent of the
11 others, correct, sir?

12 A. Yes, sir.

13 Q. Okay. So in this case, we have 70 percent --
14 well, we have -- HP is licensed, they're No. 1 at 26
15 percent, correct, sir?

16 A. They do have a license, yes, sir.

17 Q. Okay. And then in this case, we have three of
18 the next top four PC makers; is that right?

19 A. Yes, sir.

20 Q. Okay. Now -- so when -- when Mr. Jones
21 presented this slide, I think he suggested to Mr.
22 Bone -- and maybe I just misunderstood -- but the top 10
23 in sales are the first ones listed.

24 They're not listed in order, are they, sir?

25 At least not --

1 A. It was a different point in time, but I
2 don't -- it doesn't appear that they were.

3 Q. Okay. At least not based on the 2010 data,
4 right, sir?

5 A. Correct.

6 Q. Okay. So now, these -- these three PC makers
7 that make up -- that are in this case that make up a
8 good portion of this market, they've been selling
9 802 n 11 (sic) related products for six years, correct,
10 sir?

11 A. Yes, sir.

12 Q. Okay. And Intel's also in this case, correct,
13 sir?

14 A. Yes, sir.

15 Q. And Qualcomm was here to support its
16 customers, correct, sir?

17 A. I'm -- I'm -- I'm aware Qualcomm's here, yes,
18 sir.

19 Q. Okay. Now, if someone owned a standard
20 essential patent to 802.11n, wouldn't we expect they
21 would have approached one of these Defendants by now?

22 A. Could you repeat that?

23 Q. If someone had a standard essential patent
24 related to 802.11n, wouldn't they have, in the last six
25 years, approached either Dell, Acer, Apple, Intel,

1 Qualcomm, one of these Defendants at this point?

2 A. Well, some people want a licensed patent, some
3 don't. Some -- some make them available -- I don't know
4 how to answer that question. I just don't understand
5 it. I'm sorry.

6 Q. Okay. All right. Well, let's -- let's --
7 let's think about what the royalty stack is then
8 actually here.

9 You did get access to all the licenses from
10 these Defendants, correct, sir?

11 A. Yes, sir.

12 Q. Okay. But despite having all of the acc --
13 the access to all of those licenses and all the
14 documents and all those people that you talked to, you
15 don't know how many licenses Defendants actually have
16 signed, for standard essential patents, do you?

17 A. Well, I guess I don't know with a hundred
18 percent certainty what patents are essential, no, sir.

19 Q. Well, sir, I'm asking you, have you attempted
20 to determine how many licenses of each of the Defendants
21 they've signed for standard essential 802.11 patents?

22 A. Oh, including cross-licenses and everything,
23 no, sir, I did not try to make that calculation.

24 Q. Didn't try to figure that out.

25 Do you -- did you try to figure out the cost

1 per unit that these Defendants are paying for standard
2 essential 802.11 patents?

3 A. No, sir, I did not.

4 Q. You don't -- so you don't know the number of
5 licenses or the cost for standard essential patents for
6 Dell, do you, sir?

7 A. Well, no, because a lot of them are going to
8 be -- you can't figure it out, like the license we
9 looked at earlier that have thousands of patents going
10 back and forth, so, no, sir, I did not attempt to make
11 that calculation.

12 Q. Okay. You don't know the licenses, the cost
13 for standard essential patents for NETGEAR, do you, sir?

14 A. I do not know that number, no, sir.

15 Q. You don't know the number of licenses or cost
16 for standard essential patents for Toshiba, correct,
17 sir?

18 A. That's correct, yes, sir.

19 Q. But you picked out two licenses that you
20 talked about as comparable, correct, sir?

21 A. That's correct, yes, sir.

22 Q. Feher and ArrayComm, correct?

23 A. Well, the Feher was actually a purchase of
24 some patents, but I -- I did discuss that in my report,
25 yes, sir.

1 Q. Okay. And you also discussed in your report
2 that the IEEE rejected the Feher technology, correct,
3 sir?

4 A. I believe they did, yes, sir.

5 Q. Okay. And if we look at the license or the
6 patent purchase with Feher, there's -- there's three
7 patents or two patents and an application called out,
8 all related to technology that the IEEE rejected,
9 correct, sir?

10 A. I don't know if -- if they're precisely
11 one-to-one correspondence, but there are three
12 patents -- three related to 802.11 that I understand are
13 not in the standard.

14 Q. Okay. They -- they all relate to modulation,
15 correct, sir?

16 A. Yes, sir.

17 Q. And that's the technology -- the modulation
18 technique proposed by Dr. Feher, the IEEE rejected,
19 didn't they, sir?

20 A. I believe so, yes, sir.

21 Q. Okay. Now, if we look at ArrayComm, you
22 talked to Intel about ArrayComm, didn't you, sir?

23 A. Yes, sir.

24 Q. Okay. And all Intel will say is that the
25 patents licensed from ArrayComm relate to technical

1 features that may be found in the 802.11n standard -- or
2 the 802.11 standards, correct, sir?

3 A. I believe that's correct, yes, sir.

4 Q. They -- they didn't say they were standard
5 essential patents, did they?

6 A. They didn't say one way or the other, no, sir.

7 Q. Okay. And you didn't analyze either the Feher
8 or the ArrayComm patents to see if they were standard
9 essential, did you, sir?

10 A. That's not in my ballpark, no, sir.

11 Q. Okay. Now, you talked about the Infineon
12 agreement. You understand the Infineon agreement was
13 wrapped up in a 600-million-dollar deal where Ericsson
14 sold a portion of its business, correct, sir?

15 A. Yes, sir, I do.

16 Q. Okay. You also understand that the Infineon
17 agreement lists certain licensed patents, correct, sir?

18 A. Yes, sir.

19 Q. And none of the patents-in-suit are listed in
20 that -- in that agreement; is that correct, sir?

21 A. Yes -- yes, sir. That was some time ago.

22 And -- and the -- the thing I liked about the fact it
23 was part of a big transaction is that pretty much
24 requires you to have fairness opinions and -- and make
25 sure it's done at an arm's length basis and that sort of

1 thing, but, yes, sir.

2 Q. Okay, sir. DX 102 lists the licensed patents
3 and none of the patents-in-suit are listed in there for
4 the Infineon agreement; is that correct?

5 A. That's correct, yes, sir.

6 Q. Okay. All right. Now, let's talk about the
7 licenses. And first, I just want to talk a little bit
8 in general.

9 A. Okay.

10 Q. In general, you would agree that the value of
11 a patent may be derived from licenses to the patented
12 technology --

13 MR. CAMPBELL: Not yet. We're getting
14 there close. Thank you for the reminder. I appreciate
15 it. We're getting close.

16 MR. JONES: Good.

17 Q. (By Mr. Campbell) In general, the value of a
18 patent may be derived from licenses to the patented
19 technology to others who find benefits from its use,
20 correct, sir?

21 A. That's -- that's one of the Georgia-Pacific
22 Factors you can use, yes, sir.

23 Q. Well, I'm not asking you about the
24 Georgia-Pacific Factors. I'm just asking you about
25 licensing in general, sir.

1 A. There are times when that can give you useful
2 information, absolutely, yes, sir.

3 Q. You would agree with that statement, correct,
4 sir?

5 A. Yes, sir, I would.

6 Q. Okay. You would agree that in general,
7 licenses reflect the incremental value of the technology
8 to the licensee, correct, sir?

9 A. I can't really say that generally they do.
10 Ideally they would. But a lot of -- a lot of licenses
11 get done for a lot of different reasons and so I -- I
12 couldn't say -- make that as a general or universal
13 statement.

14 Q. Well, the idea is that it should reflect the
15 incremental value to the licensee, correct, sir?

16 A. That's what it's supposed to do. As I say,
17 in patents, licenses get done for a variety of reasons
18 from time to time.

19 Q. All right. And in general, it's a basic
20 principle -- there's a basic principle that the price of
21 a patented technology should reflect the amount the free
22 market is willing to pay for that technology, correct,
23 sir?

24 A. Again, that should -- that should be the way
25 it works. It doesn't always work that way in practice,

1 but it should be, yes, sir.

2 Q. Okay. I'd like to talk just a little bit
3 about the licenses we have in this case.

4 MR. CAMPBELL: And, unfortunately, Your
5 Honor, that will require me to go back into the details.

6 THE COURT: All right. I tell you, it's
7 10:30. Let's take our break at this time, and we'll go
8 back into that when we -- when we come back. So we'll
9 reconvene at 10 minutes until 11:00. We'll be in recess
10 until then.

11 COURT SECURITY OFFICER: All rise.

12 (Jury out.)

13 (Recess.)

14 (Jury out.)

15 COURT SECURITY OFFICER: All rise.

16 THE COURT: All right. You may bring the
17 jury in.

18 COURT SECURITY OFFICER: All rise for the
19 jury.

20 (Jury in.)

21 THE COURT: Please be seated.

22 All right. The Court is sealing the
23 courtroom, so if you're in the courtroom and you're not
24 covered by the Court's protective order, then you need
25 to leave the courtroom at this time until we unseal the

1 courtroom.

2 (Courtroom sealed.)

3 (Pause in proceedings.)

4 (This is Sealed Portion No. 7 and is
5 filed under separate cover.)

6 (Courtroom unsealed.)

7 Q. (By Mr. Jones) Thank you.

8 Now, in -- when we -- when we look at -- when
9 we look at the fact that these prices are going down,
10 Mr. Bone told us about a concept called the book of
11 wisdom that was used by both you and he in your analysis
12 of the hypothetical negotiation.

13 Could you tell us what that concept is?
14 Remind us of it. He already told us, but just remind us
15 of it so we can put it in context.

16 A. Yes, sir. The book of wisdom is a concept
17 that comes out of a court case, I think, back in the
18 '30s, a long time ago, and basically says, in certain
19 circumstances, including the hypothetical negotiation,
20 that you're allowed to look into the future; that is,
21 you're allowed to -- to know about a 2011 license in
22 2007, that sort of thing, just because it helps inform
23 the process to get to the appropriate market price.

24 Q. Thank you.

25 Now, with regard to these prices, what we see

1 is that in 2007, the average price of these products is
2 a little above \$5, right, sir?

3 A. Yes, sir, just about dead on it.

4 Q. Now, you were asked questions about the Intel
5 chip prices. But, now, Intel, they only supply about 9
6 percent of the products applicable to this case, right,
7 sir?

8 A. That's correct, yes, sir.

9 Q. So when you use average prices, we need to do
10 that because there are a lot of other chip makers in
11 question in the case; fair enough?

12 A. That's correct, yes, sir.

13 Q. And what we see is, here, it's a little above
14 \$5 in 2007, and then it continues to drop down to about
15 a little over 2-1/2 in 2013, right, sir?

16 A. Yes, sir. And that -- and that -- even
17 without the book of wisdom, I mean, people would know
18 that at the table, because these prices have been
19 falling from the beginning; and every other technology
20 price like this falls all the time.

21 Q. So when they are negotiating, they would take
22 that into account in their negotiation?

23 A. Oh, absolutely, yes, sir.

24 Q. Thank you.

25 Let's -- let's move on.

1 Now, we know that most of the patents
2 essential to the 802.11 standard are found in the chip
3 makers by Ericsson's own documents, correct, sir?

4 A. That's correct, yes, sir.

5 Q. And do we have examples of how these chip
6 makers are cross-licensing each other on all of these
7 patents; for example, the Broadcom/Intel cross-license,
8 the AGear/Intel cross-license?

9 A. Yes, sir, absolutely.

10 Q. And that shows us how, with regard to a lot of
11 patents, they enter into a cross-license, so they can
12 each get the technology; fair enough?

13 A. That's correct, yes, sir.

14 Q. Thank you, sir.

15 Now, in the RIM case, let me ask you this, and
16 I want to make sure we're on the same page.

17 In the RIM agreement, is there anywhere where
18 it sets forth a rate or even a cap for the five
19 patents-in-suit of \$1?

20 A. No, sir, there's not.

21 Q. Thank you, sir.

22 Now, I believe -- I'd like to next turn your
23 attention, if I could, to Defendants' Exhibit 97. And
24 I'll give you a copy of it. Give Mr. Campbell a copy of
25 it.

1 MR. JONES: Put it on the document
2 camera. I'm going to the page ending in 0006.

3 THE COURT: All right, Mr. Jones. The
4 Court needs to take up another matter for a few minutes,
5 so we're going to take about a 10-minute recess until
6 11:15.

7 MR. JONES: Yes, sir.

8 COURT SECURITY OFFICER: All rise.

9 (Jury out.)

10 (Recess.)

11 COURT SECURITY OFFICER: All rise.

12 (Jury in.)

13 THE COURT: All right. Please be seated.

14 All right, Mr. Jones. You may continue.

15 MR. JONES: Thank you, Your Honor.

16 And if I could, just as a matter of
17 housekeeping at this break, I referred to the ArrayComm
18 exhibit, that license, by the wrong exhibit number. I
19 apologize. The right exhibit number for the record is
20 Defendants' Exhibit 151.

21 THE COURT: All right.

22 MR. JONES: And I apologize to the Court.

23 Q. (By Mr. Jones) Back to what we were talking
24 about, we were talking about -- we wanted to look at
25 Defendants' Exhibit 97. And I hope I got that one

1 right. And we wanted to look at an intellectual
2 property rights presentation that was done at Ericsson.

3 And in this particular document -- and you've
4 gone through the Ericsson documents, right?

5 A. Yes, sir, I have.

6 Q. And are we on Page 6 -- I think it's 00006 of
7 that document, right, sir?

8 A. Yes, sir.

9 Q. And if we look at this document, we see what
10 Ericsson wrote here is: Compensation under FRAND must
11 reflect the patent holder's proportion of all essential
12 patents.

13 Do you see that?

14 A. Yes, sir.

15 Q. Now, in this particular case, you understand
16 that Ericsson claims it has essential patents.

17 A. I do, yes, sir.

18 Q. You understand that's a disputed fact. And
19 when I say, okay, Ericsson claims this patent, or
20 Ericsson has this patent, that's their claims. That's
21 not something that, you know, anybody's admitting in
22 this case. That issue has been joined. The swords have
23 been crossed, right, sir?

24 A. Absolutely, yes, sir.

25 Q. And you have no opinion on that --

1 A. That's correct.

2 Q. -- fair enough?

3 A. That's correct, yes, sir.

4 Q. We're talking about what Ericsson alleges.

5 But Ericsson alleges that they have certain
6 patents, and they talk about the FRAND commitment, and
7 they say: Compensation under FRAND must reflect the
8 patent holder's proportion of all essential patents.

9 Right, sir?

10 A. Yes, sir.

11 Q. Have you attempted to make a determination of
12 that proportion?

13 A. Yes, sir, I have.

14 Q. Thank you, sir.

15 MR. JONES: Now, if you -- if we could --
16 could you put up that next, please, Ms. Tekell, on the
17 document cam for me? They don't allow me to play with
18 complicated items.

19 Q. (By Mr. Jones) Now, here we see testimony from
20 Mr. Bone, and we say: We are talking about 802.11n
21 essential patents. You do not have an opinion on
22 Ericsson's actual share of the 802.11n patents, right,
23 sir?

24 And he said: That's correct.

25 You heard that testimony?

1 A. Yes, sir.

2 Q. And he also said he didn't have an opinion on
3 the Defendants' share, right, sir? We see that
4 testimony.

5 A. Yes, sir, I do.

6 Q. So he does not express an opinion on what
7 Ericsson talks about in this policy, right, sir?

8 A. That's correct, yes, sir.

9 Q. But yet you do, sir?

10 A. Yes, sir.

11 Q. Thank you, sir.

12 I would like to finally discuss for a moment
13 the HP deal and the negotiations that led up to it.
14 You were asked questions about the fact of whether the
15 HP deal concerned telephones --

16 A. Yes, sir.

17 Q. -- is that fair?

18 Thank you, sir.

19 I'd like to hand you what's been marked
20 Defendants' Exhibit 105.

21 And in the particular exhibit ---

22 MR. JONES: And can we put this on the
23 cam, too?

24 Q. (By Mr. Jones) This exhibit is an e-mail that
25 is sent by a Mr. Hans Vestberg, the president --

1 MR. JONES: Could you go down to the
2 bottom of it for me? I think it can show us...

3 Q. (By Mr. Jones) Hans Vestberg, President and
4 CEO of Ericsson, right, sir?

5 A. Yes, sir.

6 Q. And he -- and it's dated --

7 MR. JONES: Can we get the date of that?

8 Can you go down and show us that?

9 Thank you, ma'am.

10 Q. (By Mr. Jones) It's dated June the 15th, 2011,
11 right?

12 A. Yes, sir.

13 Q. And it said that we have discussed the
14 following: Web/OS and their plans for handsets.
15 Summary sent to Bert Nordberg about that.

16 You see that?

17 A. Yes, sir.

18 Q. And the "their" refers to -- if we go up
19 above, we see the subject is the Hewlett-Packard CEO,
20 right, sir?

21 A. Yes, sir.

22 Q. So they're talking about handsets there,
23 right?

24 A. Yes, sir.

25 Q. Thank you.

1 And that's a document that came up in the
2 negotiations, right, sir?

3 A. That's correct, yes, sir.

4 Q. Let's go to another document about this
5 agreement.

6 MR. JONES: Thank you, ma'am.

7 Q. (By Mr. Jones) Now, here it talks about the
8 fact of this license negotiation from the view of HP,
9 sir, right?

10 A. Yes, sir.

11 Q. And what we see here is an e-mail that was
12 sent by a Mr. Bruce Ives at HP, right, sir?

13 A. Yes, sir, that's correct.

14 Q. Now, it says here on Point 4 that the Ericsson
15 license to HP covers all smartphones regardless of unit
16 volume. Is that what's said in Point 4 on this
17 particular piece of evidence?

18 A. Yes, sir.

19 Q. Does it also go further and say about the HP
20 deal, that these terms go far beyond any realistic
21 exposure that HP has to the Ericsson patent portfolio
22 but were nevertheless approved by our CEO because of the
23 value we place on the HP/Ericsson relationship? Is that
24 what it shows?

25 A. Yes, sir.

1 Q. And what does that tell you about these
2 negotiations in this agreement, sir, as an economist?

3 A. Well, what it tells me is that, obviously, it
4 says in black and white they want to -- that they want
5 to cover smartphones, but it also says that -- that they
6 value the overall relationship between the two
7 companies.

8 And that's what happens in real-world
9 situations. That's why you don't always get to what you
10 should get to in a hypothetical negotiation in the real
11 world, because there's all kinds of things to consider.

12 Some companies like each other; some companies
13 don't like each other. And you have all kinds of issues
14 that -- like that that go on. And so you sometimes end
15 up with terms that do not reflect the incremental value
16 of the technology.

17 Q. Thank you, Dr. Perryman. You've been so kind.

18 MR. JONES: I pass the witness.

19 THE WITNESS: My pleasure, sir.

20 THE COURT: All right. Anything further?

21 MR. CAMPBELL: Very briefly.

22 RECROSS-EXAMINATION

23 BY MR. CAMPBELL:

24 Q. Dr. Perryman, you would agree that a PC maker
25 like HP knows their business, correct, sir?

1 A. Some of them better than others probably, but
2 I would agree so, yes, sir.

3 Q. Okay. And you would agree that a router maker
4 like Buffalo knows its business, correct, sir?

5 A. I would certainly hope so. I have no
6 firsthand knowledge.

7 Q. They know the price of their products and the
8 way people use their products, correct, sir?

9 A. You would think so, yes, sir.

10 Q. You would think they would know the value of
11 Wi-Fi to their products, correct, sir?

12 A. You would think they'd know the value of
13 Wi-Fi, as well as the value of relationships and a lot
14 of other things, yes, sir.

15 Q. Okay. And so if they value having permission
16 using Ericsson's technology at a rate of 50 cents per
17 device, they would be in the best position to make that
18 determination, wouldn't they, sir?

19 A. Well, if they determined to pay that much, all
20 things considered in the -- in the relationship, which
21 might be multiple things, I would think they would be in
22 a position to make that determination. They would also
23 be subject to bargaining as well, obviously.

24 Q. They would be in the best position to make
25 that determination, correct, sir?

1 A. Subject to everything I just said, yes, sir.

2 MR. CAMPBELL: Thank you, sir.

3 THE COURT: All right. Anything further?

4 MR. JONES: No, Your Honor. No further
5 questions.

6 I would like to the submit to the Court
7 as demonstratives, DDX 5-1 to DDX 5-28.

8 THE COURT: All right. Those will be
9 marked as demonstratives.

10 All right, if the jurors will pass down
11 their questions, please.

12 (Pause in proceedings.)

13 THE COURT: All right. We're going to
14 take just another short break. If you'll follow my
15 instructions, and we'll have you back here in just a
16 moment.

17 COURT SECURITY OFFICER: All rise.

18 (Jury out.)

19 THE COURT: All right. Please be seated.

20 All right. The first question is: Are
21 Intel chips in all Defendants' products?

22 Plaintiff have -- or Defendant have any
23 objection to that?

24 MR. JONES: No, Your Honor.

25 THE COURT: The Plaintiff?

1 MR. CAMPBELL: No, Your Honor.

2 THE COURT: All right. Next question:

3 In your opinion, do you think suppliers
4 would buy Wi-Fi chips regardless of price to supply to
5 customers who now demand Wi-Fi?

6 Any objection from Defendants?

7 MR. JONES: No, Your Honor.

8 THE COURT: Plaintiffs?

9 MR. CAMPBELL: No, Your Honor.

10 THE COURT: Next one: Why are other
11 laptop and chip makers not a defendant in this case if
12 they don't have a license and are using the same
13 technology as the Defendants?

14 Defendants?

15 MR. JONES: Can I consult my boss for a
16 second, Your Honor?

17 (Pause in proceedings.)

18 MR. JONES: Your Honor, this is going to
19 involve a lot of speculation on a lot of people's
20 attitudes about a lot of things, so we would object to
21 that question.

22 MR. CAMPBELL: I would agree.

23 THE COURT: All right. The Court will
24 sustain the objection to that question.

25 Next one: If you want to find a patent

1 with technology you want to license, how do you do that?

2 Is there a library? How do you know you

3 get all patents you need?

4 Defendants?

5 Do you want me to read it again?

6 MR. JONES: I think I understand it. I

7 think it's outside the scope of this witness's

8 knowledge, but...

9 THE COURT: Plaintiffs?

10 MR. CAMPBELL: Okay. I would concur with

11 Mr. Jones.

12 THE COURT: All right. I'll sustain the

13 objection to those.

14 All right. Bring the jury back in,

15 please.

16 COURT SECURITY OFFICER: All rise for the

17 jury.

18 (Jury in.)

19 THE COURT: Please be seated.

20 All right, Dr. Perryman. The first

21 question is: Are Intel chips in all of the Defendants'

22 products?

23 THE WITNESS: No, they are not.

24 THE COURT: All right. The next

25 question: In your opinion, do you think suppliers would

1 buy Wi-Fi chips regardless of price to supply to
2 customers who now demand Wi-Fi?

3 THE WITNESS: No. There are limits on
4 it. Clearly, a concept we haven't talked much about is
5 called lock-in.

6 Clearly, if you have a -- get everybody
7 producing the chip investing in the machinery to produce
8 the chip and everything else and then someone comes
9 along and asserts additional -- I would say much more
10 money, it puts the industry in a very difficult
11 position.

12 But these are very big companies that buy
13 sometimes millions, sometimes hundreds of millions of
14 chips, and they have a lot of bargaining power, and they
15 have determined over time what they're willing to pay
16 for these chips and what the market will bear for these
17 chips.

18 THE COURT: All right. Thank you.

19 Mr. Jones, any follow-up questions?

20 MR. JONES: No, Your Honor.

21 THE COURT: All right. Mr. Campbell?

22 MR. CAMPBELL: No, sir.

23 THE COURT: All right. Thank you,

24 Dr. Perryman. You may step down.

25 THE WITNESS: Thank you, Your Honor.

1 THE COURT: All right. Who will
2 Defendants' next witness be?

3 MR. JONES: Your Honor, before that, I
4 made another mistake. I basically didn't refer to the
5 exhibit number, but with regard to the e-mail from
6 Mr. Ives that we referred to dated 12/21/2011, it's
7 DX 186, Your Honor, for the record.

8 THE COURT: Thank you. All right. Okay.
9 All right. Who will Defendants next
10 witness be?

11 MR. VAN NEST: Your Honor, we're going to
12 play another short video.

13 THE COURT: All right.

14 MR. VAN NEST: And this video deposition
15 will be Mr. Andreas Iwerback. Mr. Iwerback is the
16 senior manager of patent assertions at Ericsson.

17 The time on this is about -- not about.
18 It's 9 minutes, 47 seconds. The Plaintiff is
19 responsible for 2 minutes and 15 seconds, and the
20 Defendants are responsible for 7 minutes and 32 seconds.

21 THE COURT: Okay.

22 MR. VAN NEST: Thank you, Your Honor.

23 (Video playing.)

24 QUESTION: All right. Good morning.

25 ANSWER: Good morning.

1 QUESTION: Could you please state your
2 name for the record?

3 ANSWER: Yes. My name is Andreas
4 Iwerback.

5 QUESTION: Okay. And what is your
6 position at Ericsson?

7 ANSWER: My current position at Ericsson
8 is senior manager of patent assertions.

9 QUESTION: Senior manager of patent
10 assertions?

11 ANSWER: Yes.

12 QUESTION: Okay. Have you ever had your
13 deposition taken before?

14 ANSWER: No, I haven't.

15 QUESTION: Let's focus on "a" for a
16 second. Did Ericsson have any involvement with the
17 802.11a standard?

18 ANSWER: Not to my knowledge.

19 QUESTION: Did Ericsson have any
20 involvement in the 802.11b standards?

21 ANSWER: Not to my knowledge.

22 QUESTION: Okay. Ericsson didn't make
23 any contributions to the 802.11a standards?

24 ANSWER: I don't think so.

25 QUESTION: Ericsson didn't make any

1 contributions to the 802.11b standards?

2 ANSWER: Not to my knowledge.

3 QUESTION: Okay. And has Ericsson had
4 any involvement in the development of the 802.11n
5 standards?

6 ANSWER: No, I don't believe so.

7 QUESTION: Has -- did Ericsson make any
8 contributions to the 802.11n standards?

9 ANSWER: No, not to my knowledge.

10 QUESTION: Is it correct that Ericsson is
11 unaware of any of its employees' involvement at the time
12 that any of task group "e," task group "h," or task
13 group "g" of the 802.11 standards were decided? Is that
14 a correct statement?

15 ANSWER: Yes, I believe so.

16 QUESTION: Okay. And is it correct that
17 Ericsson made no contributions to 802.11g?

18 ANSWER: That's correct.

19 QUESTION: Is it correct that the only
20 contribution that Ericsson made to any 802.11 standard
21 was one contribution made by Gunnar Rydnell to 802.11e?

22 ANSWER: Yes. To my knowledge, that's
23 correct.

24 QUESTION: And did Ericsson ever have
25 anyone who chaired an 802.11 working group or task group

1 or had any leadership position in 802.11?

2 ANSWER: Not to my knowledge.

3 QUESTION: Okay. Are you aware of any --
4 anyone -- I mean, third party and other company,
5 standards body, that has recognized or praised Ericsson
6 as a contributor to Wi-Fi?

7 ANSWER: Not to my knowledge, no.

8 QUESTION: Is it correct that Ericsson
9 makes significant investments in researching and
10 developing technology in the field of communications?

11 ANSWER: Yes, that's correct.

12 QUESTION: And is it correct that
13 Ericsson employs more than 20,000 people to work in
14 developing products and solutions? Is that correct?

15 ANSWER: Yes, I believe so.

16 QUESTION: Okay. Is it correct that in
17 2010, Ericsson invested roughly \$4 billion in research
18 and development?

19 ANSWER: Yes, that's correct.

20 QUESTION: And what percentage of that
21 research and development budget, those billions, has
22 been devoted to the development of 802.11 or Wi-Fi?

23 ANSWER: Without detailed information, I
24 don't know.

25 QUESTION: But is it correct that any

1 plans that Ericsson had to get into 802.11 product
2 development were terminated by the summer of 2001?

3 ANSWER: That's correct.

4 QUESTION: Is it correct that Ericsson
5 acquired BelAir because it wanted to have in its product
6 portfolio Wi-Fi products?

7 ANSWER: I believe so. That's quite
8 obvious from the press release, yes.

9 QUESTION: Since the beginning of the
10 802.11 standards in the '90s all the way up to
11 Ericsson's acquisition of BelAir in 2011, is it correct
12 that Ericsson did absolutely no development of 802.11
13 technologies in any products?

14 ANSWER: No. I would not say -- depends
15 on what you mean by 802.11 technologies. First of all,
16 we had some product development before we left summer of
17 2001.

18 QUESTION: Okay.

19 ANSWER: And then by saying Wi-Fi
20 technologies, I mean, that could be any wireless
21 technologies which we did research on.

22 QUESTION: Right. Up until -- what
23 product development was done by Ericsson on 802.11
24 technology prior to summer of 2011?

25 ANSWER: To my knowledge, we were looking

1 at building our own access points, Wi-Fi access points.

2 QUESTION: Okay. Okay. So Ericsson was
3 considering building Wi-Fi access points prior to the
4 summer of 2001 but discontinued those plans or
5 terminated those plans in the summer of 2001?

6 ANSWER: Yes, that's correct.

7 QUESTION: So let's talk about that for a
8 second.

9 So your testimony is that Ericsson was
10 creating Wi-Fi chipsets at some point in the 2000s?

11 ANSWER: They were trying at least, I
12 know.

13 QUESTION: Okay. And what happened --

14 ANSWER: They never hit the market.

15 QUESTION: Okay. So Ericsson was
16 attempting to create Wi-Fi chipsets in the 2000s?

17 ANSWER: Yes, I believe so.

18 QUESTION: And -- but Ericsson was unable
19 to get those products to market?

20 ANSWER: Yeah. Right.

21 QUESTION: Okay. And do you know why?

22 ANSWER: No, I don't.

23 QUESTION: Okay. And -- okay. So
24 Ericsson did some Wi-Fi product development prior to the
25 summer of 2001 but discontinued that in the summer of

1 2001, right?

2 ANSWER: Correct.

3 QUESTION: Gunnar Rydnell submitted a
4 single contribution to 802.11e when it started
5 describing quality of service that was used in the
6 HiperLAN/2; is that right?

7 ANSWER: Yes, that's correct.

8 QUESTION: I see.

9 So when Ericsson submitted its one
10 contribution to 802.11 in 802.11e, the members of
11 802.11e and the engineers thought that it was -- thought
12 that it was a complex -- it was a complex idea that
13 wasn't needed?

14 ANSWER: Right. Correct.

15 QUESTION: Okay. And what happened to
16 the HiperLAN/2 standard or standards?

17 ANSWER: I think it was just closed and
18 forgotten.

19 QUESTION: And it says: No R&D projects
20 to support portfolio work.

21 So as of this time in 2010, is it correct
22 that Ericsson had no Wi-Fi R&D projects to support its
23 attempt to develop a Wi-Fi portfolio?

24 ANSWER: That's correct.

25 QUESTION: And if we go down the page

1 just a little bit, is it correct that -- is it correct
2 that in 2010, in connection with Ericsson attempting to
3 build a Wi-Fi licensing portfolio -- patent portfolio,
4 that one of the challenges that Ericsson was facing is
5 that companies out in the world, technology companies,
6 did not look at Ericsson as a player in the Wi-Fi
7 licensing market?

8 ANSWER: Yes, I would believe so.

9 (End of video clip.)

10 THE COURT: All right.

11 MR. VAN NEST: Your Honor, that concludes
12 the video.

13 Subject to making sure that we have
14 marked all our demonstrative exhibits, which we will
15 make sure happens this afternoon, and subject to making
16 sure all of our physical documentary exhibits have been
17 moved in, Your Honor, subject to that, Defendants rest.

18 THE COURT: All right.

19 All right. Plaintiffs have rebuttal
20 witnesses you wish to call?

21 MR. STEVENSON: Yes, Your Honor, we do.

22 THE COURT: All right. Who will be your
23 first witness?

24 MR. STEVENSON: We will recall Dr. Scott
25 Nettles.

1 THE COURT: All right. Dr. Nettles.

2 MR. STEVENSON: Your Honor, may we
3 approach?

4 THE COURT: Yes, you may.

5 (Bench conference.)

6 MR. STEVENSON: Ericsson would like to
7 make a JMOL motion. We would be happy to do it now; or
8 if the Court prefer, do it the same was as we handled
9 the Plaintiff's --

10 MR. VAN NEST: That's fine, Your Honor.

11 THE COURT: All right. You may make that
12 at the end of the day.

13 MR. STEVENSON: Thank you, Your Honor.

14 (End of bench conference.)

15 SCOTT NETTLES, Ph.D., PLAINTIFFS' WITNESS,

16 PREVIOUSLY SWORN

17 DIRECT EXAMINATION

18 BY MR. STEVENSON:

19 Q. Good morning, Dr. Nettles.

20 A. Good morning.

21 Q. Let me first talk with you about the defense
22 of invalidity. Were you here for the testimony
23 regarding that?

24 A. Yes, sir, I was.

25 Q. What is the reference that you saw the

1 Defendants propose as invalidating the '435 and '625
2 patent?

3 A. There was an informative paper that was
4 submitted to ETSI by some students and a professor from
5 Aachen University.

6 Q. And that's Defendants' Exhibit 120?

7 A. I believe that's correct.

8 MR. STEVENSON: Will you zoom in on the
9 top half of that, please, Mr. Diaz?

10 A. Yes, sir. This is the reference.

11 Q. (By Mr. Stevenson) And it's entitled WG3
12 Temporary document?

13 A. Yes, sir. That's what it's entitled.

14 Q. And what are those check boxes at the bottom?

15 A. That indicates that this document was meant
16 for discussion and information but not for any kind of
17 decision.

18 Q. Do you know whether this -- or have seen any
19 evidence as to whether this contribution was ever
20 accepted into the standard?

21 A. I haven't seen any testified to that effect.

22 Q. Have you seen any evidence as to whether this
23 document was put into any products?

24 A. No, sir, I have not.

25 Q. And we saw a patent during the Defendants'

1 presentation to an inventor named Walke. Do you
2 remember that?

3 A. Yes, sir, I do remember that.

4 Q. Have you ever seen any evidence linking this
5 informational document to the Walke patent?

6 A. No, sir, I haven't.

7 Q. Have you reviewed this article?

8 A. I have.

9 Q. And does it invalidate the patent?

10 A. No, sir. It doesn't invalidate the patent.

11 Q. I'd like to talk with you about the
12 shortcomings you found in the article.

13 Can you tell us what the shortcomings are
14 that, in your view, make it not invalidate the patent?

15 A. Yes, sir.

16 So this article is about 25 pages long, but
17 the disclosure that is in this article that concerns ARQ
18 and concerns the issues we're talking about here is
19 about two-and-a-half pages long. About -- I don't
20 know -- probably half of that is just background and
21 motivation.

22 Q. Okay.

23 A. So it's -- it's very brief, and it's fairly
24 ambiguous as to exactly what it's -- what it's saying.

25 And I think the main thing that I noticed

1 about it is, there's no way that I or somebody of skill
2 in the art could use this article to really successfully
3 build a system.

4 Q. Why couldn't you use the article to build a
5 system?

6 A. Well, because it's -- it's not what we call
7 enabling, because it just doesn't have enough detail to
8 actually tell you, you know, exactly how you would build
9 a system that would avoid, for example, deadlock.

10 Q. When you're looking at prior art and
11 determining whether it invalidates a patent, why does it
12 matter whether it's enabling?

13 A. Because it's required to be enabling. Just
14 like the patent has to allow you to build the invention,
15 prior art also would have to allow you to build the
16 invention. So you need a level of detail that's --
17 that's significant.

18 Q. And if prior art isn't enabling, what's the
19 conclusion you draw?

20 A. Well, it -- it can't invalidate if it's not
21 enabling.

22 Q. Okay. What things are missing, for instance,
23 information that you would need to see to actually build
24 a system that works according to the Petras disclosure?

25 A. Well, for example, there's no real discussion

1 of how to set up the transmitter windows or the receiver
2 windows or exactly how those windows communicate or
3 coordinate. There are details missing about the exact
4 nature of the messages.

5 There's no description of any algorithms that
6 would be involved, no pseudocode like we've been seeing
7 in the patents; just a lot of technical detail that you
8 would expect to see if it was really something you could
9 build a system from.

10 Q. And have you seen any evidence anywhere that
11 anybody actually tried to take this disclosure and build
12 a system and see if it actually worked?

13 A. No, sir, I haven't.

14 Q. Were you here for the testimony of
15 Dr. Heegard?

16 A. I was.

17 Q. And did you see him go through the reference
18 with regard to the claims of the patent?

19 A. I did.

20 Q. So let's talk about that analysis.

21 What do you understand the point of doing
22 something like that is, comparing the reference to the
23 claims?

24 A. Well, it's just like the infringement
25 analysis. Each one of the limitations has to be found

1 explicitly disclosed in the reference.

2 Q. And what if it's not?

3 A. Well, then it's not invalidating.

4 Q. Okay. Did you independently review this
5 reference to compare it to the claims?

6 A. Yes, sir, I did.

7 Q. Did you also listen to Dr. Heegard's testimony
8 about this?

9 A. I did.

10 Q. Okay. Let's talk about the '625 first.

11 Did you find any claim elements in the '625
12 that weren't disclosed in the reference?

13 A. Yes, sir. This doesn't disclose the command
14 to receive a packet which is out of sequence.

15 Q. So you're referring to this Limitation (a)
16 (indicating) --

17 A. Yes, sir, I am.

18 Q. -- on the board?

19 What did Dr. Heegard identify as meeting that
20 claim limitation when he compared the publication to it?

21 A. He identified the discard message, which is
22 piggybacked on a data frame.

23 Q. Okay. Do you think that's a command to
24 receive?

25 A. No, sir, it's not. There's no disclosure here

1 that that's -- in this reference or anywhere that that's
2 a command to receive. It's just a discard message.

3 Q. Did you see some statements from Dr. Gibson's
4 report on this?

5 A. Oh, yes, sir. Dr. Gibson is very clear that a
6 discard message is not a command to receive.

7 Q. On a technical basis, how is this discard
8 notification different than a command to receive?

9 A. Well, what the discard message does is informs
10 you that some particular packet has been discarded. And
11 the effect of that is going to be to shift the window.

12 But it really doesn't have any impact on
13 whether or not out-of-order packets are going to be
14 received or not.

15 Q. Now, have you carefully read this reference
16 looking to see if the discard notification is ever
17 described or disclosed or explained as a command to
18 receive?

19 A. Well, yes, sir, I have read it carefully. As
20 I said, it's very brief; but there's definitely no
21 disclosure of that -- of that fact.

22 Q. As a result of this missing element, does the
23 Petras disclosure anticipate or render invalid the '625
24 patent?

25 A. No, sir, it does not.

1 Q. Let's move on and talk about the '435 next.

2 Did you perform a similar analysis of the

3 Petras paper comparing it to the '435 patent?

4 A. Yes, sir, I did.

5 Q. Did you try to compare the elements of '435 to

6 Petras?

7 A. Yes, sir, I did.

8 Q. What conclusion did you reach?

9 A. Well, again, there's an element that's
10 missing.

11 Q. What element is that?

12 A. Well, it's the element that involves a list
13 that you have to remove expectations from.

14 Q. Okay. Do you recall what Dr. Heegard pointed
15 to in the reference as what he was contending this list
16 was that satisfied this element?

17 A. Yes, sir. He -- he pointed to a figure in the
18 reference which was actually outside of the section that
19 was on ARQ.

20 And when I looked at that figure, first, it's
21 not really clear that that's even meant to be a data
22 structure that would be implemented in the computer; but
23 even if it were, it's a list -- it would be a list of
24 things that you would never want to remove expectations
25 from.

1 And so --

2 Q. Why not?

3 A. Oh, because it's -- the purpose of this --
4 this list is to make a calculation about timestamps.

5 And if you actually removed things from it,
6 that calculation would become incorrect.

7 Q. Does the patent require removing entries from
8 a list?

9 A. Well, and -- and from a list of a specific
10 kind. So yes, sir.

11 Q. So that the omission of that disclosure leads
12 you to conclude what?

13 A. That it is not -- is not an invalidating
14 reference.

15 Q. So in your view, is the '435 patent valid or
16 invalid?

17 A. It is valid.

18 Q. Okay. Dr. Nettles, I'd like now to talk about
19 the '215 patent and switch gears to talk about
20 infringement, and I'd like to get you to respond to some
21 of the points that the Defendants have made through
22 their case.

23 A. Yes, sir.

24 Q. First, the '215 patent, what do you understand
25 the Defendants' argument to be with regard to

1 non-infringement?

2 A. They're saying that because they only use
3 compressed BlockAck, that they don't infringe the
4 patent.

5 Q. Now, we received during the testimony a jury
6 question, and I'd like to pose it to you. And the
7 question was -- and I may be paraphrasing it a bit --
8 is: Does the choice of acknowledgement apply only to
9 time of response or the choice of acknowledgement type
10 from a standard at the time of programming?

11 What's your answer to that question?

12 A. Well, I think that either of those cases would
13 be infringing. So as long as a manufacturer chooses
14 something that is from the 802.11 standard, that would
15 be infringement.

16 Q. Can you explain why you say that, Dr. Nettles?

17 A. Yes, sir. This -- this claim -- if we look at
18 the -- at the preamble, we can -- we can see this. Just
19 to be clear, the preamble is not a limitation, but it
20 does set some context for the claim.

21 And we see that it's a method for improving,
22 basically, an ARQ protocol. And so that tells me that
23 it's about the standard. It's about how you improve
24 some aspect of the standard.

25 Q. And let me -- let me stop you there and ask

1 you, why does the word ARQ protocol connote to you or
2 make you think about this as a standard-type patent?

3 A. Because the standard in this case is where
4 we're specifying how the protocols work. And this is
5 specifying how the protocol would work in general,
6 things like what the packet formats would be.

7 Q. Has this patent been used in other standards?

8 A. Yes, sir. It's been used in 3G.

9 Q. Okay. And let me ask you this question: If
10 the Defendants here are using the compressed BlockAck
11 option from the standard, why do they need to transmit
12 those two bits, that field, the type identifier field,
13 if they're all just using the compressed BlockAck?

14 A. Yes, sir. The -- in -- in 802.11, and what
15 they're transmitting, it's actually the Multi-TID and
16 compressed BlockAck field.

17 And they need to transmit that because there's
18 a possibility that some other manufacturer will be
19 transmitting some other value in that field, and they
20 need to check that field to make sure that their
21 products are processing BlockAcks that their products
22 understand how to deal with.

23 So it's important to process that field, even
24 though they don't change it.

25 Q. Is this because it's a global standard, and

1 there's a lot of manufacturers making things that have
2 to talk together?

3 A. Exactly for that reason.

4 Q. Okay. And why is this patent useful?

5 A. Well, again, we just talked about how there is
6 a global manufacturing taking -- taking advantage of the
7 general standard.

8 This gives flexibility to the manufacturers to
9 choose to implement different kinds of BlockAcks, maybe
10 to bring products to market that would differentiate
11 themselves from other people in the market.

12 So flexibility is the big advantage.

13 Q. Okay. Let's move on to the '625 patent next.

14 What arguments have the Defendants made with
15 regard to this patent?

16 A. Here, they say there's no command to receive
17 an out-of-sequence packet.

18 Q. Do you agree?

19 A. No, sir, I don't.

20 Q. What have you found is the command in the
21 802.11n products?

22 A. Well, I found that the A-MPDUs and the MPDUs,
23 the packets themselves, are the commands.

24 Q. How can a packet be a command?

25 A. Well, we should understand that in these

1 systems, the systems have been programmed to follow the
2 rules of the standard. And so because of the
3 programming, there's really no choice as to whether or
4 not -- what's going to happen when the packet comes in.

5 So if we look back at our electric eye at the
6 grocery store example that was introduced yesterday,
7 that grocery store door is programmed. It's designed so
8 that when you come up to it, it will automatically open,
9 that you will command it to open. It doesn't have a
10 choice. You don't have to do anything additional.

11 And the same thing is true here. Exactly what
12 happens to the packets when they come into the system
13 is -- is programmed in. It's not something there's any
14 flexibility about.

15 Q. Now, let me ask you to describe for us the --
16 we call it the preferred embodiment or the example in
17 the patent.

18 A. Yes, sir.

19 Q. And before I want -- to ask you to describe
20 it, you understand, don't you, that when you write a
21 patent, you have to give an example or a best way of
22 carrying out your invention.

23 A. Yes, sir, I do understand that.

24 Q. But then when the Patent Office awards you
25 claims, they can be broader and cover more things than

1 just your specific disclosure.

2 A. Oh, yes, sir. That's a very important aspect
3 of this.

4 Q. With that caution in mind, would you explain
5 to us how the '625 example discloses or describes the
6 command?

7 A. Yes, sir. In the '625 example, a packet is a
8 command, but there's a special bit, a 1 or a 0, in the
9 packet that says whether or not this packet is actually
10 going to act as a command.

11 Q. Okay. Here's my question now: That 1 or 0,
12 that 1 bit in that packet in the example of the
13 patent --

14 A. Yes, sir.

15 Q. -- that one bit, is that enough for the
16 receiver to make a decision of whether to make it out of
17 sequence or not?

18 A. Yes, sir. As described in the example, that's
19 exactly enough.

20 Q. Now, does the receiver have to have something
21 in it programmed in so that 1 or 0 makes any sense?

22 A. Oh, of course. I mean, these are computers.
23 They don't just look at stuff and figure things out;
24 they have to be creative to understand those kinds of
25 things.

1 Q. And in the case of the Defendants, do they
2 program in their receivers to make decisions about
3 patents?

4 A. Yes, sir, of course. They have to.

5 Q. What kind of parallels can you draw between
6 the preferred embodiment and what the Defendants are
7 doing?

8 A. Well, I think the most obvious parallel is,
9 you could imagine that you just always set the bit to 1.
10 So every packet is a command, not just the ones that you
11 set to 1.

12 So if there was always a 1, then every packet
13 would be a command, and that would be just like what the
14 Defendants are doing.

15 Q. And if they're doing that, why bother
16 transmitting the bit anymore?

17 A. Exactly. Once you decide it's always a 1, you
18 don't need to transmit it. And now we have exactly the
19 system that we're talking about in the accused products.

20 Q. Okay. So we've seen this example in the
21 slides from the Defendants a lot, of this traffic light.

22 A. Yes, sir.

23 Q. Okay. Where's that traffic light programmed
24 in?

25 A. Well, it's -- it's part of the logic that

1 makes up these systems. I mean, I -- you know, these
2 are complicated systems. So exactly where it is, we
3 would have to go into a lot of detail. But it's part of
4 the programming.

5 Q. Okay. Now, do you recall seeing the
6 Defendants provide some deposition testimony from Peter
7 Larsson?

8 A. I did.

9 Q. And I want to show that to you. I think we've
10 seen this a couple of times.

11 This is the testimony where he was asked: If
12 you had a system where you could -- you could send
13 regular, old data packets like the one in Figure 5
14 outside the top edge of the receiver's window and it
15 would just accept them, would you need a command to the
16 receiver that it should accept the packet with a
17 sequence number out of order?

18 And he said: No.

19 Do you remember seeing that?

20 A. Yes, sir. We've seen this a number of times.

21 Q. But have you ever been shown or have
22 Defendants shown the jury the next question and answer
23 from the deposition?

24 A. The Defendants have not shown this part.

25 Q. Okay. Read that and explain its significance

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1 in understanding the prior question and answer, please.

2 A. So the -- the subsequent question is: Why
3 not?

4 And the answer is: Because if the transmitter
5 sends packet -- I think that should have been a
6 packet -- outside the expected -- the receiver window,
7 something went wrong, and the ARQ will not work, and it
8 has to restart.

9 And what I -- what I understand about that is
10 that Mr. Larsson understood the question to be -- to be
11 different than it's allowed to do it. He understood it
12 to be this is an error condition. I think really it's
13 the result of a poor hypothetical question from the
14 attorney.

15 Q. So if you -- if you have a restart or an error
16 condition, is there any point in sending a command.

17 A. No, sir. I mean, I just don't think that Mr.
18 Larsson was addressing the question that -- the question
19 of whether or not the command would be necessary outside
20 the window. I think he was addressing the question of
21 whether or not this system that was described to him was
22 broken, and he says it's broken.

23 Q. Let me ask you this: We've heard a lot about
24 deadlock.

25 A. Yes, sir.

1 Q. Did the '625 solve a deadlock problem?

2 A. Yes, sir, it did.

3 Q. Does 802.11n suffer from deadlock problems?

4 A. No, sir, not -- not this particular deadlock
5 problem, not at all.

6 Q. Why doesn't it?

7 A. Well, it -- it uses the invention of the '625
8 to avoid that deadlock situation.

9 Q. Is this an important invention?

10 A. Well, yes, sir, it is.

11 Q. Okay. Let me ask you next about the '435
12 patent.

13 What argument do you understand Defendants are
14 making to contend they don't infringe this patent?

15 A. Well, here they're saying that the receiver
16 doesn't compute the packets that the transmitter has
17 discarded.

18 Q. Okay. Do the receivers that are at issue in
19 this case make that computation of packets the
20 transmitter has discarded?

21 A. Oh, yes, sir, they have to.

22 Q. Will you please explain to us how they do
23 that?

24 A. In these systems, there's both a receive
25 window and a transmit window, and those two windows

1 are -- are coordinated. And when the receive window
2 shifts, then the receiver's actually -- in addition to
3 calculating what packets are now below its window, it's
4 also calculating what packets are below the
5 transmitter's window.

6 Q. Well, Dr. Nettles, the Defendants have
7 asserted that the receiver doesn't care what the
8 transmitter has discarded or not discarded. Do you
9 agree with that?

10 A. No, sir, I don't agree with that at all.
11 The trans -- the receiver cares a lot about what has
12 been discarded by the transmitter. And the reason is
13 because anything that's below the transmitter's window
14 has been discarded, and it would be an error.

15 In fact, it would result in exactly the
16 deadlock we've been talking about, if the receiver was
17 to wait for one of those discarded packets or to
18 repeatedly ask the transmitter to retransmit it because
19 the transmitter has discarded it.

20 So it's actually very important that the --
21 that the receiver know what packets have been discarded.
22 I mean, I think that's really the point of the
23 invention.

24 Q. Okay. Let -- let me ask you to step us
25 through this just step-by-step, so we make sure we -- we

1 understand it.

2 Tell us about the first step. How does the
3 receiver know or compute what's behind its own window?

4 A. Well, we've seen a lot of -- of MAC from the
5 standards over the last several days, so those
6 pseudocode -- and that's basically the standard
7 explaining how the receiver is going to move its window
8 and -- and what's going to happen.

9 Q. Okay. Do all receivers know where their start
10 window is?

11 A. Yes, sir, that -- there's no way for them not
12 to.

13 Q. Okay. Now let's go to Step 2.

14 How does the receiver figure out where the
15 transmitter window is?

16 A. The transmitter tells it by sending either
17 implicit or explicit block acknowledgement requests.

18 Q. How do those explicit and implicit block
19 acknowledgement requests from the transmitter tell the
20 receiver where the transmit window is?

21 A. Well, they have sequence numbers in them that
22 tell the -- tell the receiver this.

23 Q. The -- the sequence number of each individual
24 packet?

25 A. In the case of the implicit BlockAck request.

1 In the case of the explicit one, there's
2 actually just a single sequence number.

3 Q. Okay. And that's what the transmitter sends
4 over to the receiver?

5 A. Exactly.

6 Q. Okay. What evidence do you have that these
7 block acknowledgement requests actually move the
8 receiver window over?

9 A. Well, that's -- that's in the standard. The
10 standard explains how, when you receive an implicit or
11 an explicit block acknowledgement request, how the
12 window is going to move.

13 Q. Okay. Have you also confirmed this by looking
14 at technical documents for the accused products?

15 A. Yes, sir, I have.

16 Q. Okay. So we've talked about how the receiver
17 knows where its window is for the start?

18 A. Yes, sir.

19 Q. Then how the transmitter can tell the
20 receiver, through these BARs, where its window is and
21 what to do -- how to move --

22 A. That's right.

23 Q. What about the point that they actually move
24 in coordination or in synchronization? What evidence
25 have you seen for that?

1 A. Well, again, that's discussed in the standard.

2 Q. Is that the portion that we looked at with Dr.
3 Gibson yesterday?

4 A. Yes, sir, we looked at it yesterday with Dr.
5 Gibson.

6 MR. STEVENSON: Mr. Diaz, would you put
7 up Plaintiff's Exhibit 286 at 9.10.7.7?

8 Q. (By Mr. Stevenson) We discussed this with Dr.
9 Gibson. Will you explain to us in your own words what
10 this provision is and how it factors into your opinion?

11 A. Well, it explains when the originator --
12 that's the transmitter -- can transmit an MPDU that has
13 a sequence number that's beyond its current transmission
14 window. And then it explains that both its transmission
15 window and the recipient's transmission window will move
16 forward.

17 So this is explaining that -- how this process
18 works of moving the windows in a coordinated manner.

19 Q. Have you also seen, in addition to the
20 standard, evidence from the products themselves --

21 A. Yes, sir, I --

22 Q. -- that confirm this is going on?

23 A. I have.

24 MR. STEVENSON: Can you put up
25 Plaintiff's Exhibit 443, please, at Page 3209?

1 Q. (By Mr. Stevenson) Is this an Intel data
2 sheet?

3 A. Yes, sir. It's for the Kedron processor, one
4 of the chips that we've been talking about.

5 MR. STEVENSON: And this is Page 3209 at
6 the bottom, I believe, Mr. Diaz. Thank you.

7 Would you zoom in on 7, Paragraph 7?

8 Thank you.

9 Q. (By Mr. Stevenson) Where does this document
10 provide evidence that supports your testimony?

11 A. This is -- this is explaining than MPDUs that
12 precede the BlockAck window are released by the driver,
13 and this is when the BlockAck frame causes the window
14 movement to -- the window movement to start. And
15 then -- I mean, I think --

16 Q. You're looking at --

17 A. -- this whole set is talking about this.

18 Q. Were you looking at 7b, just so the record's
19 clear?

20 A. Oh, yes, sir, 7b.

21 Q. Thank you.

22 And does this show that the transmitter moves
23 in synchronization its window with the receiver?

24 A. Yes, sir.

25 Q. Okay. Now, let me ask you finally the -- the

1 claim discusses packets the transmitter has discarded.

2 What happens to packets that are behind the
3 transmission window in the transmitter?

4 A. Well, since the transmitter knows it's no
5 longer going to retransmit those packets, it doesn't
6 have to keep remembering them, so it discards them.

7 Q. Okay. Now, we've gone through all the
8 step-by-step logic. Have you prepared for us a visual
9 that we can use to see how it works in operation?

10 A. Yes, sir, I have.

11 Q. Okay. Tell us, please, what we're seeing
12 here.

13 A. At the top, we see the transmitter, and we see
14 that it has a full buffer of packets there ready to
15 transmit. And we see its window in green, indicating
16 that it can currently transmit Packets 1, 2, 3, and 4.

17 Q. And at the bottom, what is the R?

18 A. That's the receiver. And, again, we see
19 its -- its window in green, in this case, indicating
20 that it's ready to receive 1, 2, 3, and 4.

21 Q. Okay. What happens?

22 A. The transmitter transmits the packets. One of
23 them is lost. Now it's going to transmit a BlockAck
24 that indicates that that packet was lost.

25 Q. And that's -- the "it" is the receiver going

1 to the transmitter?

2 A. Sorry. The receiver will transmit the
3 BlockAck to the transmitter, indicating that Packet 2
4 was lost but 1, 3, and 4 were received.

5 Q. Okay.

6 A. And now the transmitter is going to decide
7 that -- it's not going to try to retransmit 2, so it's
8 going to shift its window. It's going to do another
9 transmission. The receiver window is going to shift --

10 Q. Okay.

11 A. -- in response.

12 Q. Is this -- are they in sync?

13 A. Yes, sir.

14 Q. Now, what happens to all of the packets in the
15 transmitter side behind this window, 1, 2, 3, 4?

16 A. Well, they -- they've been discarded because
17 they're not needed anymore.

18 Q. Okay. Now, does the receiver know where the
19 start window is?

20 A. Yes, sir, it does.

21 Q. And does the receiver -- what does it expect
22 or do with regards to Packets 1, 2, 3, and 4?

23 A. Well, the ones it receives, it hands up to the
24 higher levels of the network, and the one that it didn't
25 receive, 2, it just forgets about.

1 Q. So is this computation being made by the
2 receiver of what -- where its window is and what's in
3 the past able to also compute what the transmitter's
4 discarded?

5 A. Well, yes, sir, and it needs to, because it
6 doesn't want to be waiting for something that's been
7 discarded.

8 Q. Now, what happens next in this sequence?

9 A. It's going to repeat itself over and over
10 again, as -- as we've seen.

11 Q. Okay.

12 A. So we saw the BlockAck go up. Now we see the
13 window shift. The -- the packets are transmitted, and
14 then the window shifts.

15 Q. Okay. Now, in the real world, how fast is all
16 this happening?

17 A. Well, thousands -- I think Mr. Kitchen even
18 said tens of thousands of times a second.

19 Q. So these things are basically just flying
20 along, and are they always staying in tandem, like two
21 cars drag racing, neck and neck?

22 A. Yes, sir. The transmitter's always a little
23 bit ahead of the receiver -- either the same or a little
24 bit ahead.

25 Q. Okay. In your opinion, does the receiver

1 compute packets the transmitter has discarded by this
2 mechanism?

3 A. Oh, yes, sir, it does.

4 Q. Is this patent infringed?

5 A. Absolutely.

6 Q. Let's talk next about the '568 patent.

7 What points have the Defendants raised as a
8 argument for non-infringement as to this patent?

9 A. They've claimed that there's a lack of a
10 service type identifier.

11 Q. Okay. And were you here for Dr. Gibson's
12 testimony?

13 A. I was.

14 Q. He told us that Ekiga uses this invention.

15 And my question to you is: Does whether this
16 apparatus infringes depend on how many applications are
17 currently using this invention?

18 A. No, sir, not at all.

19 Q. So what's the significance to you of Dr.
20 Gibson's testimony?

21 A. Well, he showed that the products in question
22 are capable of enabling an application that wants to use
23 the invention to use it, and in particular, Ekiga.

24 Q. Okay. How did that factor into your
25 infringement analysis?

1 A. The infringement analysis in this case,
2 because it's an apparatus claim, has to do with the
3 capability of doing something. It's not about the
4 number of times or the number of programs that use it.

5 It's about whether or not the accused products
6 can do this -- provide this function, and they
7 absolutely can.

8 Q. And you've seen examples where they not only
9 can, but they do?

10 A. Oh, yes, sir, I have.

11 Q. Let's talk next about the '223 patent, the
12 last one.

13 What do you understand Defendants are arguing
14 as their non-infringement position for this patent?

15 A. Here they have two non-infringement positions.
16 One is that there is no segmenting, and the other one is
17 that the timer is not set at the beginning of the data
18 link layer.

19 Q. Let's take those two one-by-one. Let's talk
20 about segmenting first. We've heard a lot about
21 fragmentation.

22 A. Yes, sir.

23 Q. And seen a lot of documents about that.

24 Is there a difference between fragmenting and
25 segmenting?

1 A. Oh, yes, sir, there is a difference.

2 Q. Would you explain just to a person who's not a
3 computer expert like myself why there's a difference in
4 these two words that most people just take as being
5 similar?

6 A. In -- in technical parlance we often use words
7 which are -- are similar in just normal conversation in
8 a precise way.

9 And so when we talk about fragmenting, we're
10 invariably talking about splitting something into two
11 pieces or more. But when we talk about segmenting, what
12 we're really talking about is the process of taking one
13 packet and putting it into another packet to create a
14 segment.

15 And if the resulting segment would be too
16 large to be transported, perhaps creating a second
17 segment or a third segment so that we could fit all of
18 the first packet that we started with inside of the --
19 of the segments that we were going to create.

20 Q. Okay. Can you give me an example of what
21 segmenting is in the computer parlance?

22 A. Yes, sir. So I -- I think a good real-world
23 example would be if we look at all these boxes that we
24 see around the courtroom. And those -- those are
25 segments -- we can think about those are segments.

1 That's the container --

2 Q. Like these?

3 A. -- exactly. That's the container that we want
4 to put a stack of file folders into.

5 Q. Let me stop you for a second. I want to make
6 sure I understand. I want to link this up.

7 A. Okay.

8 Q. The claim says a service data unit going into
9 at least one protocol data unit.

10 A. Yes, sir.

11 Q. In that example you're giving us, what's
12 the -- what's the white box?

13 A. The white box is the protocol data unit or
14 data units.

15 Q. And in the real-computer world, is a protocol
16 data unit like a container?

17 A. Yes, sir, it is a container.

18 Q. Okay. What is the -- in this example, what is
19 the service data unit? What corresponds to that?

20 A. That's the stack of file folders that we want
21 to put into the -- into the protocol data unit.

22 Q. All right. So now explain how segmenting
23 works in that example, please.

24 A. We've got a stack of folders, and we're going
25 to put them into a box. And if it turns out that our

1 stack is too big to fit in one box, then we're going to
2 use a second box, maybe a third box. But if the stack
3 is small enough to fit into one box, then we're just
4 going to use one box.

5 Q. All right. Is that why it says at least one
6 in the claim?

7 A. Yes, sir. You have to use one. It doesn't
8 matter how many -- how few file folders you have, as
9 long as you have some, but you have to use one, but you
10 might use more.

11 Q. How did you gain this understanding of what
12 this word segmenting means?

13 A. Well, I teach about fragmentation and
14 segmentation in my courses. Over the last 15 years,
15 I've probably taught this at the graduate and
16 undergraduate level over 30 times.

17 THE COURT: All right, Counsel. I
18 believe we'll go ahead and break for lunch at this time.
19 It's 12:10.

20 Ladies and Gentleman of the Jury, we'll
21 be in recess until 12:45. Please remember the Court's
22 instructions, and we'll see you back here then.

23 COURT SECURITY OFFICER: All rise.

24 (Jury out.)

25 THE COURT: Please be seated.

1 Mr. Stevenson, how much longer do you
2 anticipate for direct of this witness?

3 MR. STEVENSON: I would say five minutes.

4 THE COURT: Oh, okay.

5 And how long do you anticipate on cross?

6 MR. VAN NEST: I think it will be 30 to
7 45 minutes, Your Honor, to deal with what we've covered
8 so far.

9 THE COURT: Then will you have any other
10 witnesses?

11 MR. STEVENSON: I do not think so. I
12 think we'll be done.

13 THE COURT: All right. So let's see, we
14 come back -- it means we should be through with all of
15 the evidence by 1:30.

16 Parties, be prepared to move right into
17 charging the jury and closing argument at that time. Be
18 any problem for anybody?

19 MR. CAWLEY: Little bit, Your Honor,
20 since we haven't seen the charge and haven't made any
21 objections to it.

22 THE COURT: Oh, you'll have time to do
23 that.

24 MR. CAWLEY: Oh, okay.

25 THE COURT: But I know yesterday I

1 indicated you'd probably be arguing on Wednesday
2 morning, and I just -- would you be prepared to go
3 forward if we can get to it today?

4 MR. CAWLEY: No.

5 THE COURT: Okay. What about Defendants?

6 MR. VAN NEST: I'm ready to go forward
7 whenever, Your Honor.

8 THE COURT: All right. I told you
9 yesterday, I think we'll take the leisurely approach and
10 we'll press on, then we'll do the charge and then we'll
11 let the jury go.

12 I had hoped we might be able to get some
13 more in today because it's going to crowd us up toward
14 the end of the week, but I did indicate, which I
15 shouldn't have, yesterday that we might -- might go.

16 So -- all right, anything else before we
17 adjourn for lunch?

18 MR. VAN NEST: Nothing here, Your Honor.

19 THE COURT: All right. And I'll have a
20 copy of the Court's charge to you for you to look over
21 during the lunch hour, and we'll hear objections
22 immediately following the conclusion of testimony.

23 MR. CAWLEY: Thank you, Your Honor.

24 THE COURT: Be in recess.

25 COURT SECURITY OFFICER: All rise.

1 (Lunch recess.)

2

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4 CERTIFICATION

5

6 I HEREBY CERTIFY that the foregoing is a
7 true and correct transcript from the stenographic notes
8 of the proceedings in the above-entitled matter to the
9 best of our abilities.

10

11

12 /s/ Shea Sloan
SHEA SLOAN, CSR
13 Official Court Reporter
State of Texas No.: 3081
14 Expiration Date: 12/31/14

15

16

/s/ Judith Werlinger
17 JUDITH WERLINGER, CSR
Deputy Official Court Reporter
18 State of Texas No.: 731
Expiration Date 12/31/14

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